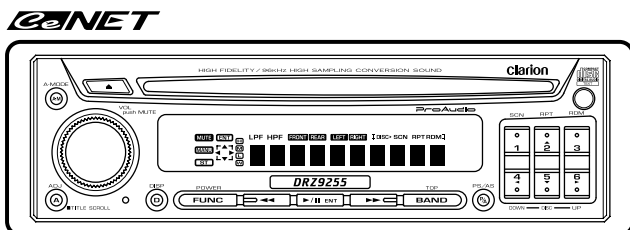
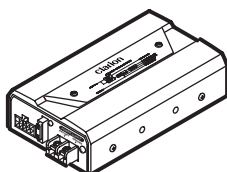


# Service Manual



(DRZ9255)



## High-Fidelity AM/FM CD Player

Model **DRZ9255**  
(PE-2628B-A / For U.S.A.)

Model **HX-D2**  
(PE-2628K-A / For other countries)

## SPECIFICATIONS

### FM tuner section

Frequency range: 87.9MHz to 107.9MHz(U.S.A.)  
87.0MHz to 108.0MHz(OTHERS)  
Usable sensitivity: 9dBf  
50dB quieting sensitivity: 15dBf  
Alternate channel selectivity: 70dB  
Stereo separation: 35dB (1kHz)  
Frequency response: 30Hz to 15kHz (+/-3dB)

### AM tuner section

Frequency range: 530kHz to 1710kHz(U.S.A.)  
531kHz to 1629kHz(OTHERS)  
Usable sensitivity: 25uV

### CD player section

System: Compact disc digital audio system  
Usable discs: Compact disc  
Frequency response: 5Hz to 20kHz (+/-1dB)  
S/N ratio: 112dB (1kHz)  
Dynamic range: 100dB (1kHz)  
Distortion: 0.003%(20Hz to 20kHz)

### Audio section

Bass control action: +/-12dB (50Hz)  
Treble control action: +/-12dB (10kHz)  
Line output level: Vol.0dB=4V  
Vol.+6dB=8V(Max)  
(CD 1kHz)

### DSP/DAC

A/D conversion: 24-bit 64x oversampling  $\Delta\Sigma$   
A/D converter  
D/A conversion: 96kHz/24-bit advanced segment  
D/A converter

8x oversampling digital filter

Blocked band attenuation:

-130 dB

Transmitted band attenuation:

+/-0.00001dB

Sampling rate converter

Input sampling rate: fs32k, fs44.1k, fs48k, fs96k

Output sampling rate: fs48k, fs96k

DSP: 24-bit audio DSP, 34-bit arithmetic operation (overflow margin 4-bit)

### General

Power supply voltage: 14.4V DC(10.8V to 15.6V allowable) negative ground

Current consumption: Less than 5A

Dimensions(mm)

Source unit: 178(W)x50(H)x155(D)

DC-DC converter: 163(W)x42(H)x98(D)

Remote control unit: 52(W)x125(H)x12(D)



Weight

Source unit: 1.8kg

DC-DC converter: 700g

Remote control unit: 50g(including battery)

## NOTES

\* Use only compact discs bearing the  or  mark. Do not play heart-shaped, octagonal, or other specially shaped compact discs.

Some CDs recorded in CD-R/CD-RW mode may not be usable.

\* We cannot supply PWB with component parts in principle. When a circuit on PWB has failure, please repair it by component parts base. Parts which are not mentioned in service manual are not supplied.

\* Specifications and design are subject to change without notice for further improvement.

## COMPONENTS

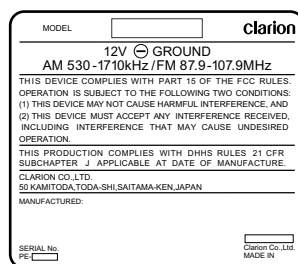
### PE-2628B-A, PE-2628K-A

1.	Main unit	-----	1	10.	Ground lead(BLK:1.5m)	854-6424-01	1
2.	DC-DC converter	EE-1236B-A	1	11.	Parts bag for DC-DC converter	-----	1
3.	Rmote controller	RCB-169-600	1	11-1.	Mounting bracket	300-7362-02	2
4.	Battery(CR2025)	-----	1	11-2.	Terminal cover	345-7403-00	1
5.	Strap	300-4976-00	1	11-3.	Tapping screw	700-5016-89	4
6.	Universal MTG-bracket	300-9035-01	1	11-4.	Machine screw(M5x8)	714-4008-89	4
7.	Outer escutcheon	370-6116-00	1	11-5.	Plate nut	725-0216-00	4
8.	16-Pin extension lead(1.5m)	854-6428-00	1	12.	Parts bag for source unit	-----	1
	(Fuse 3A	120-0030-00	1 )	12-1.	Hook plate	330-8216-03	2
9.	Memory B/U lead(YEL:3.5m)	854-6423-01	1	12-2.	Lead holder	335-0833-03	1
	(Fuse 10A	060-0057-56	1 )	12-3.	Hexagonal screw(M5x8)	716-0496-01	1

## CAUTIONS

Use of controls, adjustment or performance of procedures other than those specified herein, may result in hazardous radiation exposure.

The COMPACT DISC player should not be adjusted or repaired by anyone except properly qualified service personnel.



Bottom View of DRZ9255

## To engineers in charge of repair or inspection of our products.

Before repair or inspection, make sure to follow the instructions so that customers and Engineers in charge of repair or inspection can avoid suffering any risk or injury.

### 1. Use specified parts.

The system uses parts with special safety features against fire and voltage. Use only parts with equivalent characteristics when replacing them.

The use of unspecified parts shall be regarded as remodeling for which we shall not be liable. The onus of product liability (PL) shall not be our responsibility in cases where an accident or failure is as a result of unspecified parts being used.

### 2. Place the parts and wiring back in their original positions after replacement or re-wiring.

For proper circuit construction, use of insulation tubes, bonding, gaps to PWB, etc, is involved. The wiring connection and routing to the PWB are specially planned using clamps to keep away from heated and high voltage parts. Ensure that they are placed back in their original positions after repair or inspection.

If extended damage is caused due to negligence during repair, the legal responsibility shall be with the repairing company.

### 3. Check for safety after repair.

Check that the screws, parts and wires are put back securely in their original position after repair. Ensure for safety reasons there is no possibility of secondary problems around the repaired spots.

If extended damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.

### 4. Caution in removal and making wiring connection to the parts for the automobile.

Disconnect the battery terminal after turning the ignition key off. If wrong wiring connections are made with the battery connected, a short circuit and/or fire may occur. If extensive damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.

### 5. Cautions regarding chips.

Do not reuse removed chips even when no abnormality is observed in their appearance. Always replace them with new ones. (The chip parts include resistors, capacitors, diodes, transistors, etc). The negative pole of tantalum capacitors is highly susceptible to heat, so use special care when replacing them and check the operation afterwards.

### 6. Cautions in handling flexible PWB

Before working with a soldering iron, make sure that the iron tip temperature is around 270°C. Take care not to apply the iron tip repeatedly (more than three times) to the same patterns. Also take care not to apply the tip with force.

### 7. Turn the unit OFF during disassembly and parts replacement. Recheck all work before you apply power to the unit.

### 8. Cautions in checking that the optical pickup lights up.

The laser is focused on the disc reflection surface through the lens of the optical pickup. When checking that the laser optical diode lights up, keep your eyes more than 30cms away from the lens. Prolonged viewing of the laser within 30cms may damage your eyesight.

### 9. Cautions in handling the optical pickup

The laser diode of the optical pickup can be damaged by electrostatic charge caused by your clothes and body. Make sure to avoid electrostatic charges on your clothes or body, or discharge static electricity before handling the optical pickup.

### 9-1. Laser diode

The laser diode terminals are shorted for transportation in order to prevent electrostatic damage. After replacement, open the shorted circuit. When removing the pickup from the mechanism, short the terminals by soldering them to prevent this damage.

### 9-2. Actuator

The actuator has a powerful magnetic circuit. If a

magnetic material is put close to it. Its characteristics will change. Ensure that no foreign substances enter through the ventilation slots in the cover.

### 9-3. Cleaning the lens

Dust on the optical lens affects performance. To clean the lens, apply a small amount of isopropyl alcohol to lens paper and wipe the lens gently.

## SYSTEM CHECK

The first time this unit is turned on after the wire connections are completed, it must be checked what equipment is connected. When the power is turned on, " SYSTEM CHK " and " Push POWER " appear in the display alternately, so press the [FUNC] button. The system check starts within the unit. When the system check is complete, press the [FUNC] button again.

### Digital wiring

When the optical digital cable is connected to or disconnected from this set later, press the function button while holding down direct buttons [1] and [6] with the power OFF to perform a system check.

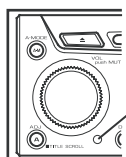
Though pressing the reset button also performs a system check, the contents of memory will be erased completely in this case.

## ERROR DISPLAYS

If an error occurs, one of the following displays is displayed.

Take the measures described below to eliminate the problem.

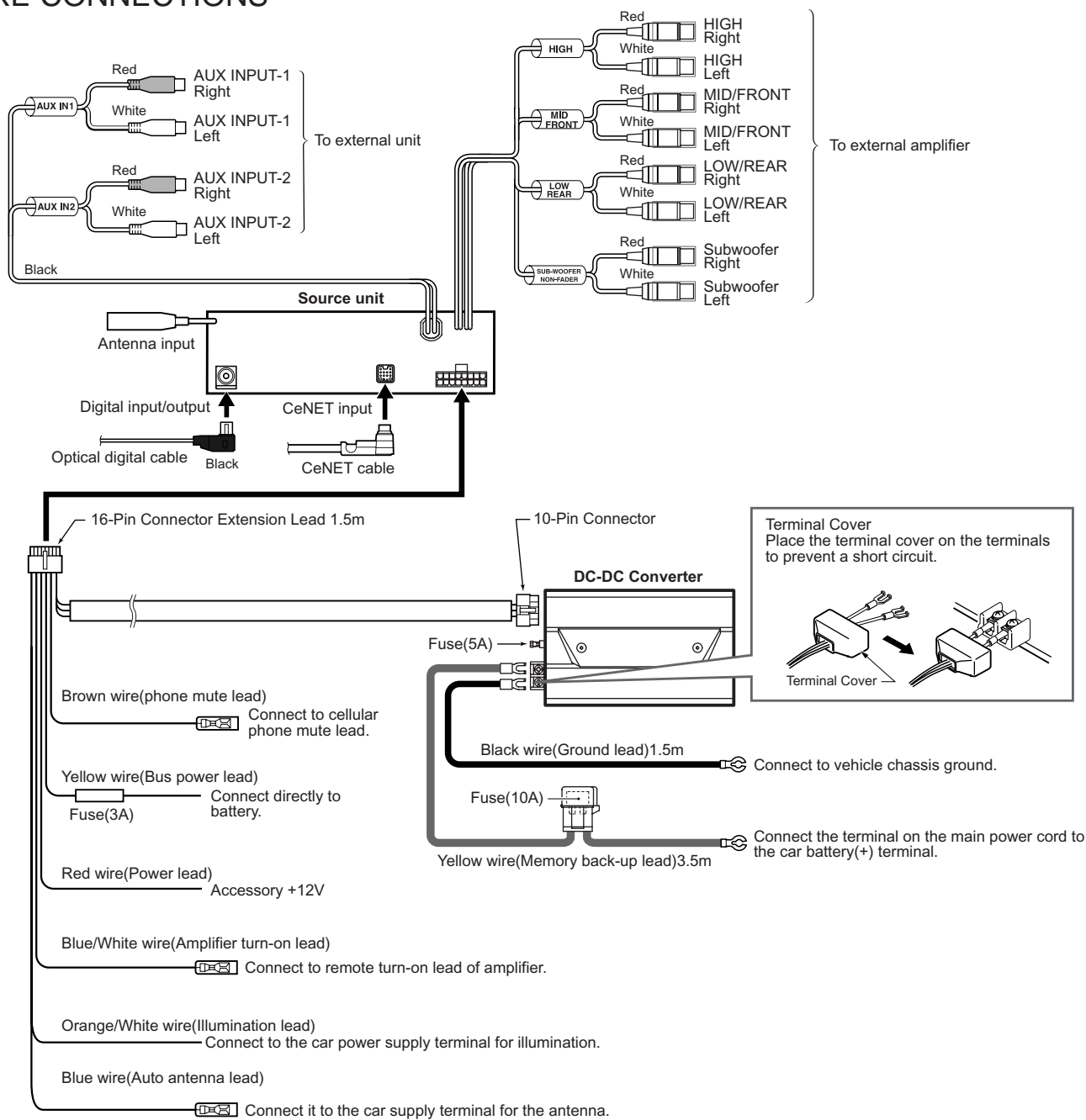
	Error Display	Cause	Measure
CD	<b>ERROR 2</b>	A CD is caught inside the CD deck and is not ejected.	This is a failure of CD deck's mechanism.
	<b>ERROR 3</b>	A CD cannot be played due to scratches,etc.	Replace with a non-scratched,non-warped-disc.
CD changer	<b>ERROR 2</b>	A CD inside the CD changer is not loaded.	This is a failure of CD changer's mechanism.
	<b>ERROR 3</b>	A CD inside the CD changer cannot be played due to scratches, etc.	Replace with a non-scratched, non-warped disc.
	<b>ERROR 6</b>	A CD inside the CD changer cannot be played because it is loaded upside-down.	Eject the disc then reload it properly.
DVD changer	<b>ERROR 2</b>	A DISC inside the DVD changer cannot be played.	This is a failure of DVD mechanism.
	<b>ERROR 3</b>	A DISC cannot be played due to scratches,etc.	Retry or replace with a non-scratched, non-warped-disc.
	<b>ERROR 6</b>	A DISC inside the DVD changer cannot be played because it is loaded upside-down.	Eject the disc then reload it properly.
	<b>ERROR P</b>	Parental level error	Set the correct Parental level.
	<b>ERROR R</b>	Region code error	Eject the disc and replace correct region code disc.



If an error display other than the ones described above appears, press the reset button.

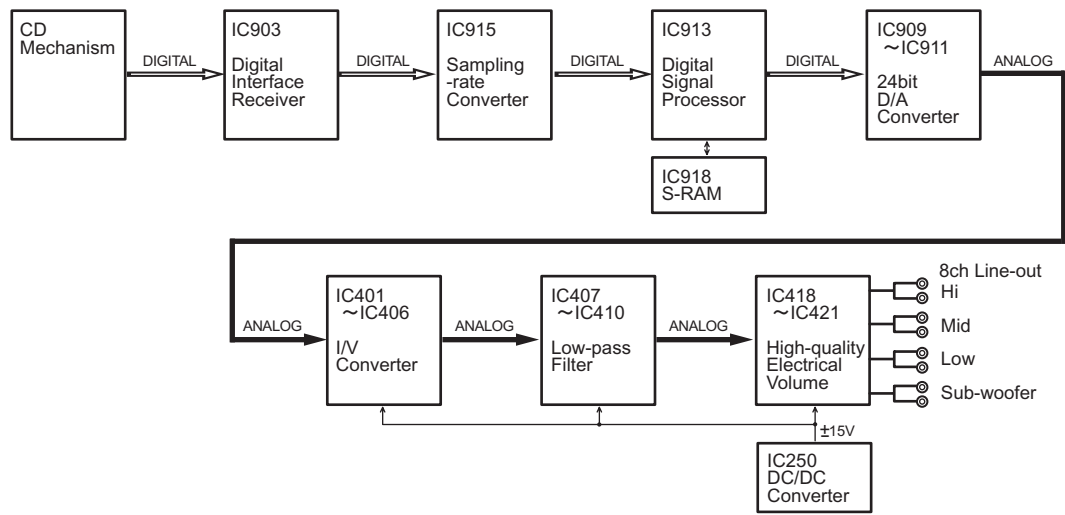
Reset button

WIRE CONNECTIONS

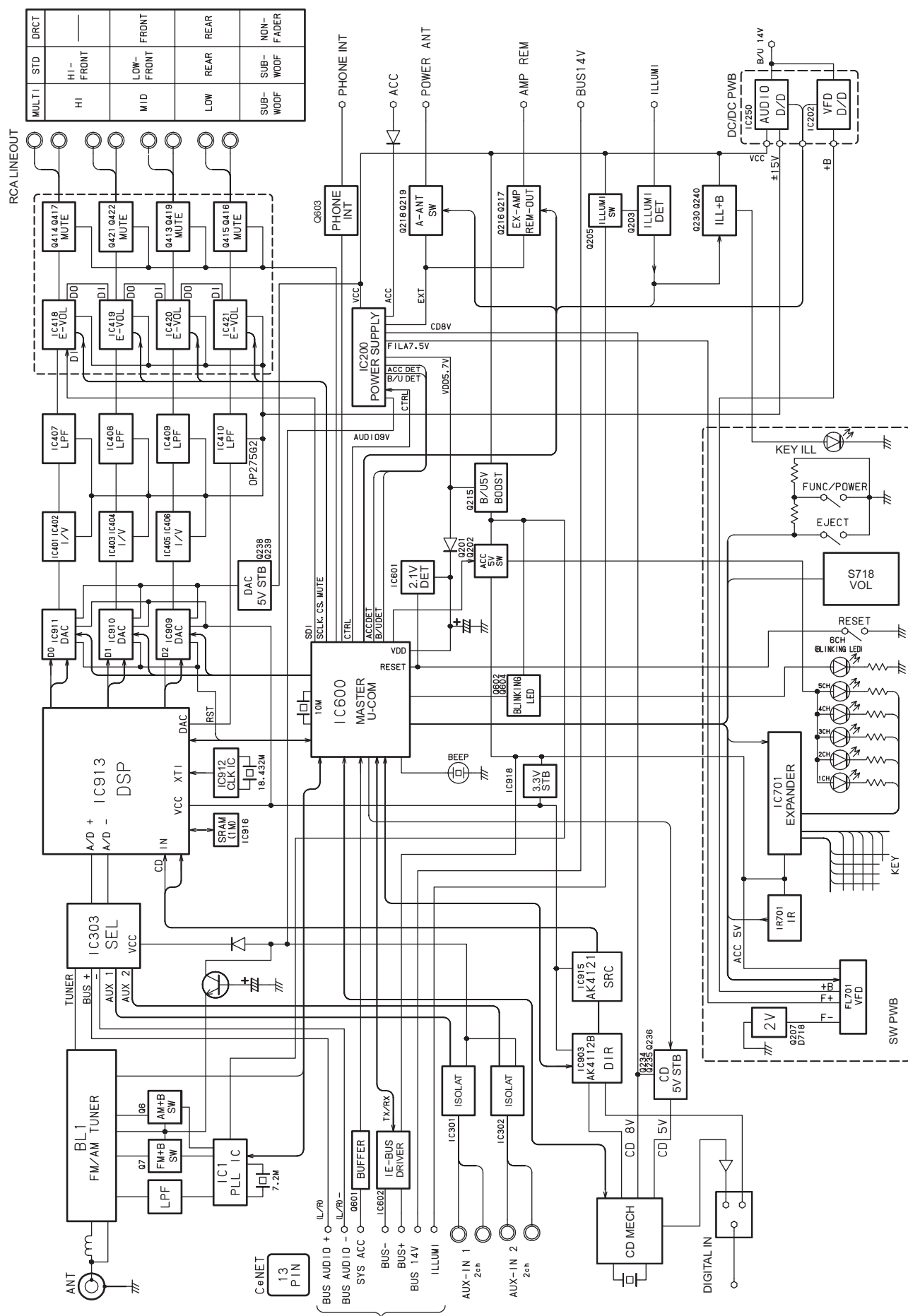


BLOCK DIAGRAM

Audio line section



## System section



# EXPLANATION OF IC

052-3393-00 M30622MEP-161GP System Controller

## Terminal Description

pin 1: CD SBSY	: IN: The sub Q data request command input from the CD IC.
pin 2: TIME BASE	: IN: Time base pulse input.
pin 3: DSP RDY	: IN: Ready signal input from the DSP IC.
pin 4: NU	: - : Not in use.
pin 5: REMOCON	: IN: Remote controller signal input terminal.
pin 6: BYTE	: IN: The data length selection(8bit/16bit).
pin 7: CN VSS	: IN: Connect to VSS.
pin 8: INIT 1	: IN: Destination setting input. Refer Table 1.
pin 9: INIT 2	: IN: Destination setting input. Refer Table 1.
pin 10: RESET	: IN: Reset signal input.
pin 11: X out	: O: Crystal connection.
pin 12: VSS	: - : Negative voltage supply.
pin 13: X IN	: IN: Crystal connection.
pin 14: VCC	: - : Positive voltage supply.
pin 15: NU	: - : Not in use.
pin 16: ACC DET	: IN: ACC detection signal input.
pin 17: BU DET	: IN: Backup detection signal input.
pin 18: KEY INT	: IN: Key interrupting signal input.
pin 19: 27pinConnect	: IN: Connect to pin 27.
pin 20: VFD BLANK	: O: Blank pulse output to the VFD driver.
pin 21: BUS IN/out	: O: The audio signal control for Ce-NET.
pin 22: BEEP	: O: Beep out.
pin 23: E VOL CS	: O: The chip select signal output to Electric Volume IC.
pin 24: E VOL SD	: O: The serial data output to Electric Volume IC.
pin 25: E VOL SCLK	: O: The serial clock output to Electric Volume IC.
pin 26: CLK REF	: O: Reference clock pulse output.
pin 27: IE BUS RX	: IN: IE Bus serial data input.
pin 28: IE BUS TX	: O: IE Bus serial data output.
pin 29: EMULATOR TX	: O: The serial data output to the emulator.
pin 30: EMULATOR RX	: IN: The serial data input from the emulator.
pin 31: CONNECT G	: - : Connect to the ground.
pin 32: NU	: - : Not in use.
pin 33: VFD SO	: O: The serial data output to the VFD driver.
pin 34: NU	: - : Not in use.
pin 35: VFD CLK	: O: The clock pulse output to the VFD driver.
pin 36: VFD LAT	: O: The latch strove signal output to the VFD driver.
pin 37: JOG CW	: IN: Jog key signal input.
pin 38: JOG CCW	: IN: Jog key signal input.
pin 39: CONNECT G	: - : Connect to the ground.
pin 40: CATS LED	: O: CATS LED drive output.
pin 41: KEY Set	: O: Set signal output to the key scan IC.
pin 42: KEY CHIP SEL	: O: The chip select signal output to the key scan IC.
pin 43: KEY CLK	: O: The clock pulse output for the key scan IC.
pin 44: CONNECT G	: - : Connect to the ground.
pin 45: KEY DI	: IN: Key scan data input.
pin 46: KEY DO	: O: The serial data output to the Key scan IC.
pin 47: LD MUTE	: O: Muting signal output to the CD mechanism.
pin 48: LD CONT	: O: The laser diode control signal output.
pin 49: CD TR A	: IN: The photo sensor signal input from the CD mechanism.
pin 50: CD TR B	: IN: The photo sensor signal input from the CD mechanism.
pin 51: CD CHK SW	: IN: CD disc chucking signal input.
pin 52: CD SSTOP	: IN: At loading, detects the chucking. And next, detects the inside limit of the pick up position.
pin 53: CD RESET	: O: The reset pulse output to the CD IC.
pin 54: CD CCE	: O: The chip enable signal output to the CD IC.
pin 55: CD BU CK	: O: CD IC clock pulse output.
pin 56: CD BUS 3	: I/O: The data bus.
pin 57: CD BUS 2	: I/O: The data bus.
pin 58: CD BUS 1	: I/O: The data bus.
pin 59: CD BUS 0	: I/O: The data bus.

pin 60: VCC	: - : Positive voltage supply.
pin 61: CD 5V	: O: 5V power supply ON signal output for CD.
pin 62: VSS	: - : Negative voltage supply.
pin 63: REG CTRL	: O: Power supply IC control signal output.
pin 64: 5V REM	: O: 5V power supply ON signal output.
pin 65: PLL SI	: IN: Serial data input from the PLL IC.
pin 66: PLL SO	: O: Serial data output to the PLL IC.
pin 67: PLL SCK	: O: The clock pulse output to the PLL IC.
pin 68: PLL CE	: O: The chip enable signal output to the PLL IC.
pin 69: ST SD	: IN: At receiving the FM station, this port detects the stereo signal. At seeking or scanning, this port detects the station detection signal.
pin 70: VFD DD ON	: O: VFD DD converter ON signal output.
pin 71: ILL DET	: IN: Illumination ON signal input.
pin 72: DIR ERF	: IN: Unlock & Parity error flag input from the DIR IC.
pin 73: PHONE INT	: IN: The telephone interrupt signal input.
pin 74: AUTO ANT	: O: Motor antenna control signal output.
pin 75: AMP REM	: O: Standby signal output to Audio power amplifier.
pin 76: DIG In/Out sel	: O: Digital input/output selection.
pin 77: SYS MUTE	: O: System muting signal output.
pin 78: PRE MUTE	: O: Pre-mute signal output.
pin 79: SEL CLK	: O: The serial clock output to the audio selector IC.
pin 80: SEL DATA	: O: The serial data output to the audio selector IC.
pin 81: KEY ILL REM	: O: Key illumination ON signal output.
pin 82: DAC MC	: O: Clock pulse output to the DAC.
pin 83: DAC MD	: O: Serial command data output to the DAC.
pin 84: DAC MS	: O: Chip select output to the DAC.
pin 85: DIR PDN	: O: The power down signal output to the DIR IC.
pin 86: PCM DET	: IN: Non-PCM detection signal input.
pin 87: DIR CDT O	: O: The control data output to the DIR IC.
pin 88: DIR CCLK	: O: The control clock output to the DIR IC.
pin 89: DIR CSN	: O: The chip select output to the DIR IC.
pin 90: DSP INIT RST	: O: The reset signal output to DSP IC.
pin 91: DSP RST	: O: Reset pulse output to the DSP IC.
pin 92: SYS ACC	: O: ACC detect signal output.
pin 93: DSP REQ	: O: Request signal output to DSP IC.
pin 94: A VSS	: - : Negative voltage supply for analog section.
pin 95: KEY AD	: IN: Input terminal of A/D converter for Key judgment.
pin 96: Vref	: - : Reference voltage.
pin 97: A VCC	: - : Positive voltage supply for the internal analog section.
pin 98: DSP SI	: IN: Serial data input from the DSP IC.
pin 99: DSP SO	: O: Serial data output to the DSP IC.
pin100: DSP SCK	: O: The clock pulse output to DSP IC.

Table 1. Destination setting

	Japan	Noth America	Asia
INIT 1 ( pin 8 )	H	H	L
INIT 2 ( pin 9 )	H	L	L



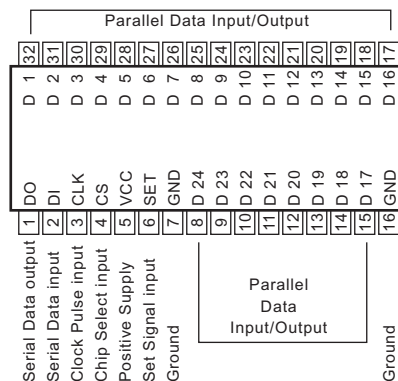
## Terminal Description

pin 1: LFLT	: IN: The capacitor and the resistor connection terminal for PLL.	pin 61: I/O 3	: I/O: Data input/output.
pin 2: A VSS	: - : Analog ground.	pin 62: I/O 4	: I/O: Data input/output.
pin 3: A VDD	: - : Positive supply voltage for the Analog section.	pin 63: I/O 5	: I/O: Data input/output.
pin 4: INIT RESET	: IN: The initial reset input.	pin 64: I/O 6	: I/O: Data input/output.
pin 5: CODEC RESET	: IN: The CODEC reset input.	pin 65: I/O 7	: I/O: Data input/output.
pin 6: DSP RESET	: IN: DSP reset input.	pin 66: D VDD	: - : Positive supply voltage for the digital section.
pin 7: S MUTE	: IN: The soft muting command input.	pin 67: D VSS	: - : Digital ground.
pin 8: B VSS	: - : Ground for the bus interface section.	pin 68: TEST	: - : For the Test.
pin 9: PLL	: IN: Open or Connect to DVSS usually.	pin 69: TEST	: - : For the Test.
pin 10: CKS	: IN: The clock pulse selection.	pin 70: B VSS	: - : Ground.
pin 11: S Data in A	: IN: DSP serial data input. Open or connect to DVSS usually.	pin 71: A OUT 3 R-	: O : Inverted Right channel audio signal output of DAC-3.
pin 12: S Data in 1	: IN: DSP serial data input.	pin 72: A OUT 3 R+	: O : Non-inverted Right channel audio signal output of DAC-3.
pin 13: S Data in 2	: IN: DSP serial data input.	pin 73: NU	: - : Not in use.
pin 14: S Data out 1	: O : DSP serial data output.	pin 74: A OUT 3 L-	: O : Inverted Left channel audio signal output of DAC-3.
pin 15: S Data out 2	: O : DSP serial data output.	pin 75: A OUT 3 L+	: O : Non-inverted Left channel audio signal output of DAC-3.
pin 16: S Data out 3/AD	: O : DSP/ADC serial data output.	pin 76: A OUT 2 R-	: O : Inverted Right channel audio signal output of DAC-2.
pin 17: S D OUT	: O : The serial data output.	pin 77: A OUT 2 R+	: O : Non-inverted Right channel audio signal output of DAC-2.
pin 18: LR CK I/O	: I/O: SMODE(pin20) = L : 1fs clock input. SMODE(pin20) = H : 1fs clock output.	pin 78: NU	: - : Not in use.
pin 19: BIT CLK	: I/O: SMODE(pin20) = L : 64fs clock input. SMODE(pin20) = H : 64fs clock output.	pin 79: A OUT 2 L-	: O : Inverted Left channel audio signal output of DAC-2.
pin 20: S MODE	: IN: Slave master selection.	pin 80: A OUT 2 L+	: O : Non-inverted Left channel audio signal output of DAC-2.
pin 21: Clock Out	: O : Clock Out.	pin 81: NU	: - : Not in use.
pin 22: D VSS	: - : Digital ground.	pin 82: A OUT 1 R-	: O : Inverted Right channel audio signal output of DAC-1.
pin 23: D VDD	: - : Positive supply voltage for the digital section.	pin 83: A OUT 1 R+	: O : Non-inverted Right channel audio signal output of DAC-1.
pin 24: XT I	: IN: Oscillation terminal.	pin 84: NU	: - : Not in use.
pin 25: XT O	: O : Oscillation terminal.	pin 85: A OUT 1 L-	: O : Inverted Left channel audio signal output of DAC-1.
pin 26: JX	: IN: External jumping signal input.	pin 86: A OUT 1 L+	: O : Non-inverted Left channel audio signal output of DAC-1.
pin 27: RQ	: IN: The request signal input from the master side.	pin 87: Vr DAC Low	: IN: The reference voltage input.
pin 28: S CLK	: IN: Sift clock input.	pin 88: A VSS	: - : Analog ground.
pin 29: SI	: IN: Serial data input.	pin 89: A VSS	: - : Analog ground.
pin 30: SO	: O : Serial data output.	pin 90: A VDD	: - : Positive supply voltage for the Analog section.
pin 31: Write Ready	: O : Write ready flag output.	pin 91: Vr DAC High	: IN: The reference voltage input.
pin 32: Data Ready	: O : Data output ready flag output.	pin 92: NU	: - : Not in use.
pin 33: CAS	: O : The column address strobe output to DRAM.	pin 93: Vr ADC Low	: IN: The reference voltage input.
pin 34: RAS	: O : The row address strobe output to DRAM.	pin 94: A VSS	: - : Analog ground.
pin 35: WRITE ENBL	: O : The write enable signal output.	pin 95: A VDD	: - : Positive supply voltage for the Analog section.
pin 36: D VDD	: - : Positive supply voltage for the digital section.	pin 96: Vr ADC High	: IN: The reference voltage input.
pin 37: D VSS	: - : Digital ground.	pin 97: A IN R-	: IN: Inverted Right channel audio signal input.
pin 38: A 0	: O : Address signal output.	pin 98: A IN R+	: IN: Non-inverted Right channel audio signal input.
pin 39: A 1	: O : Address signal output.	pin 99: A IN L-	: IN: Inverted Left channel audio signal input.
pin 40: A 2	: O : Address signal output.	pin100: A IN L+	: IN: Non-inverted Left channel audio signal input.
pin 41: A 3	: O : Address signal output.		
pin 42: A 4	: O : Address signal output.		
pin 43: A 5	: O : Address signal output.		
pin 44: A 6	: O : Address signal output.		
pin 45: A 7	: O : Address signal output.		
pin 46: A 8	: O : Address signal output.		
pin 47: A 9	: O : Address signal output.		
pin 48: A 10	: O : Address output to the external DRAM.		
pin 49: A 11	: O : Address output to the external DRAM.		
pin 50: A 12	: O : Address signal output.		
pin 51: A 13	: O : Address signal output.		
pin 52: A 14	: O : Address signal output.		
pin 53: A 15	: O : Address signal output.		
pin 54: A 16	: O : Address signal output.		
pin 55: D VDD	: - : Positive supply voltage for the digital section.		
pin 56: D VSS	: - : Digital ground.		
pin 57: OUT ENABLE	: O : The output enable command output.		
pin 58: I/O 0	: I/O: Data input/output.		
pin 59: I/O 1	: I/O: Data input/output.		
pin 60: I/O 2	: I/O: Data input/output.		

## Terminal Description

pin 1: IPF OUT	: O : IP flag output.
pin 2: SB OK O	: O : Sub code Q data CRCC OK signal output.
pin 3: CLOCKIO	: I/O : The clock pulse input/output for the sub code reading.
pin 4: VDD	: - : Positive supply voltage.
pin 5: VSS	: - : Negative supply voltage.
pin 6: DATA	: O : DATA
pin 7: SF SY O	: O : Playback frame synchronous signal output.
pin 8: SB SY O	: O : Sub code block synchronous signal output.
pin 9: HSO	: O : The play speed flag output.
pin 10: UHSO	: O : The play speed flag output.
pin 11: AR SEL IN	: IN : Fix to the high level.
pin 12: AWRC	: O : The control signal output for the active wide range VCO.
pin 13: P VDD	: - : PLL positive supply voltage.
pin 14: PDO	: O : Phase difference signal output of EFM-PLCK.
pin 15: TMAX S	: O : T max judgment output.
pin 16: TMAX	: O : T max judgment output.
pin 17: LPF N	: IN : Inverted input of LPF for PLL.
pin 18: LPF OUT	: O : The output terminal for the Low Pass Filter.
pin 19: P Vref	: - : PLL reference voltage.
pin 20: VCO FILTER	: O : Loop filter for VCO.
pin 21: VCO Ref	: IN : VCO reference voltage input.
pin 22: DTC N	: O : For the analog slicer.
pin 23: DTC P	: O : For the analog slicer.
pin 24: PLL VSS	: - : PLL ground.
pin 25: SLCO	: O : Output of internal DAC for data slice level generation.
pin 26: RF IN	: IN : RF signal input.
pin 27: RF RP	: IN : RF ripple input.
pin 28: RF EQ OUT	: O : The output of the RF equalizer.
pin 29: A VDD	: - : Positive supply voltage for the Analog section.
pin 30: RES IN	: - : For reference current setting.
pin 31: Vref OUT	: O : The reference voltage output.
pin 32: VMDIR	: O : The reference voltage output.
pin 33: TESTR	: O : The compensation terminal for RFEQO off-set.
pin 34: INVSEL	: IN : MDI polarity selection.
pin 35: AGCI	: IN : The input terminal of RF AGC amplifier.
pin 36: RF DCI	: IN : The input terminal for RF peak detection.
pin 37: RF OUT	: O : RF signal output.
pin 38: PN SEL	: IN : The transistor type selection input for laser diode driver. L=NPN, H=PNP.
pin 39: EQ SET	: O : The equalizer setting terminal.
pin 40: RF VDD	: - : RF power supply.
pin 41: LDO	: O : The laser diode drive output.
pin 42: MDI	: IN : Monitor photo diode signal input.
pin 43: RF VSS	: - : RF ground.
pin 44: FNI 2	: IN : Main beam signal input.
pin 45: FNI 1	: IN : Main beam signal input.
pin 46: FPI 2	: IN : Main beam signal input.
pin 47: FPI 1	: IN : Main beam signal input.
pin 48: TPI	: IN : Sub beam signal input.
pin 49: TNI	: IN : Sub beam signal input.
pin 50: FTEO	: O : For test.
pin 51: RF ZI	: IN : RF ripple zero cross signal input.
pin 52: A VSS	: - : Analog ground.
pin 53: RF RP	: O : RF ripple signal output.
pin 54: RF DC	: O : RF peak detection signal output. (hologram suitable)
pin 55: FEI	: O : Focus error signal output.
pin 56: SBAD	: O : Sub beam add signal output.
pin 57: TEI	: O : Tracking error signal output.
pin 58: TE Z IN	: IN : Tracking error signal input for zero cross.
pin 59: A VDD	: - : Positive supply voltage for the Analog section.
pin 60: FOO	: O : Focus equalizer output.

pin 61: TRO	: O : Tracking equalizer output.
pin 62: Vref	: O : Reference voltage output.
pin 63: FMO	: O : Field equalizer output / Speed error output.
pin 64: DMO	: O : Disk equalizer output.
pin 65: IO2A	: I/O : General input/output.
pin 66: IO3A	: I/O : General input/output.
pin 67: MONIT	: O : Internal DSP signal monitor.
pin 68: FG IN	: IN : FG input for the spindle CAV servo.
pin 69: VSS	: - : Negative supply voltage.
pin 70: VDD	: - : Positive supply voltage.
pin 71: TESIN	: IN : For test.
pin 72: X VSS	: - : Master clock analog ground.
pin 73: X IN	: IN : Crystal connection.
pin 74: X O	: O : Crystal connection.
pin 75: X VDD	: - : Clock power supply.
pin 76: D VSS	: - : Digital ground.
pin 77: RO	: O : Right channel data output for 1-bit DAC.
pin 78: D VDD	: - : Positive supply voltage for the digital section.
pin 79: D Vref	: O : Digital reference voltage.
pin 80: LO	: O : Left channel data output for 1-bit DAC.
pin 81: D VSS	: - : Digital ground.
pin 82: Z DET O	: O : 1bit DAC zero flag output.
pin 83: VSS	: - : Negative supply voltage.
pin 84: BUS 0	: I/O : CD IC Data input / output.
pin 85: BUS 1	: I/O : CD IC Data input / output.
pin 86: BUS 2	: I/O : CD IC Data input / output.
pin 87: BUS 3	: I/O : CD IC Data input / output.
pin 88: BU CK IN	: IN : CD IC Data clock input.
pin 89: CCEI	: IN : Chip enable input.
pin 90: RSTI	: IN : Reset signal input.
pin 91: VDD	: - : Positive supply voltage.
pin 92: EMPHI/FAO	: I/O : Emphasis input for 1-bit DAC / Flag A output.
pin 93: BCKI/FBO	: I/O : Bit clock input for 1-bit DAC / Flag B output.
pin 94: AIN/FCO	: I/O : Audio input for 1-bit DAC / Flag C output.
pin 95: LRCKI/FDO	: I/O : LR clock input for 1-bit DAC / Flag D output.
pin 96: EMPHO	: O : Emphasis flag output. H=Emphasis ON.
pin 97: B CK O	: O : Bit clock output.
pin 98: A OUT	: O : Audio signal output.
pin 99: LR CK O	: O : LR clock output.
pin100: D OUT	: O : Serial data output.





## Terminal Description

pin 1: D VDD	: - : Positive voltage supply for the digital section.
pin 2: D VSS	: - : Digital ground.
pin 3: T VDD	: - : Positive voltage supply for output-buffer.
pin 4: VALIDITY	: O : Validity flag output in the parallel mode.
: TX	: O : Transmit channel (through data) output in serial mode.
pin 5: XT I	: IN: Oscillation terminal.
pin 6: XT O	: O : Oscillation terminal.
pin 7: PDN	: IN: Power down & reset signal input.
pin 8: RESIST	: - : The resistor connection.
pin 9: A VDD	: - : Positive voltage supply for analog section.
pin 10: A VSS	: - : Negative voltage supply for analog section.
pin 11: RX 1	: IN: The receiver channel 1 in serial mode.
pin 12: DIF 0	: IN: The audio data format selection in parallel mode, refer Table 1.
: RX 2	: IN: The receiver channel 2 in serial mode.
pin 13: DIF 1	: IN: The audio data format selection in parallel mode, refer Table 1.
: RX 3	: IN: The receiver channel 3 in serial mode.
pin 14: DIF 2	: IN: The audio data format selection in parallel mode, refer Table 1.
: RX 4	: IN: The receiver channel 4 in serial mode.
pin 15: PCM DET	: O : Non-PCM detect. L = Non detect.
pin 16: PARA/SERI	: IN: Parallel("H")/Serial("L") mode select input.
pin 17: FS96	: O : 96kHz Sampling detect. RX mode H : fs = 88.2kHz or more L : fs = 54kHz or less Xtal mode H : XFS96 = 1 L : XFS96 = 0
pin 18: ERF	: O : Unlock & Parity error output. L = No error.
pin 19: LR CK I/O	: I/O: Left/Right clock.
pin 20: SDT O	: O : The audio serial data output.
pin 21: BI CK	: I/O: Audio serial data clock.
pin 22: D AUX	: IN: Auxiliary audio serial data input.
pin 23: MCK O 2	: O : Master clock output, refer Table 2.
pin 24: MCK O 1	: O : Master clock output, refer Table 2.
pin 25: OCK Sel 0	: IN: Output clock select in parallel mode, refer Table 2.
: CSN	: IN: Chip select input in serial mode.
pin 26: OCK Sel 1	: IN: Output clock select in parallel mode, refer Table 2.
: C CLK	: IN: Control clock input in serial mode.
pin 27: CM 1	: IN: Master clock operation select input in parallel mode, refer Table 3.
: CDTI	: IN: Control data input in serial mode.
pin 28: CM 0	: IN: Master clock operation select input in parallel mode, refer Table 3.
: CDTO	: O : Control data output in serial mode.

Table 1. Audio data format

DIF 2 (pin 14)	DIF 1 (pin 13)	DIF 0 (pin 12)	D AUX (pin 22)	SDT O (pin 20)	LR CK (pin 19)	BI CK (pin 21)
0	0	0	24bit Left justified	16bit Right justified	H/L	64fs
0	0	1	24bit Left justified	18bit Right justified	H/L	64fs
0	1	0	24bit Left justified	20bit Right justified	H/L	64fs
0	1	1	24bit Left justified	24bit Right justified	H/L	64fs
1	0	0	24bit Left justified	24bit Left justified	H/L	64fs
1	0	1	24bit Left justified	24bit Left justified	L/H	64fs
1	1	0	24bit Left justified	24bit Left justified	H/L	64-128fs
1	1	1	24bit Left justified	24bit Left justified	H/L	64-128fs
			I2S	I2S	Output	Output
			I2S	I2S	Input	Input

Table 2. Master clock frequency select

OCK S 1 (pin 26)	OCK S 0 (pin 25)	MCK O 1 (pin 24)	MCK O 2 (pin 23)	X'tal	fs(kHz)
0	0	256fs	256fs	256fs	32.0 44.1 48.0 96.0
0	1	256fs	128fs	256fs	32.0 44.1 48.0 96.0
1	0	512fs	256fs	512fs	32.0 44.1 48.0
1	1	-	-	Test Mode	-

Table 3. Clock operation mode select

CM 1 (pin 27)	CM 0 (pin 28)	UNLOCK	PLL	X'tal	Clock source	FS96 (pin 17)	SDT O (pin 20)
0	0	x	ON	OFF	PLL	RFS96	RX
0	1	x	OFF	ON	X'tal	XFS96	D AUX
1	0	0	ON	ON	PLL	RFS96	RX
1	0	1	ON	ON	X'tal	XFS96	D AUX
1	1	x	ON	ON	X'tal	XFS96	D AUX

## Terminal Description

pin 1: FILT	: O : PLL filter output.
pin 2: A VSS	: - : Negative voltage supply for analog section.
pin 3: PDN	: IN: Power down & reset signal input.
pin 4: S MUTE	: IN: The soft muting command input.
pin 5: DEM 0	: IN: De-emphasis Frequency Selection.
pin 6: DEM 1	: IN: De-emphasis Frequency Selection.
pin 7: I LR CK	: IN: Left/Right clock input for the input signal.
pin 8: I BI CK	: IN: Bit clock input for the input signal.
pin 9: SDT I	: IN: The serial data input.
pin 10: I DIF 0	: IN: Input data format select.
pin 11: I DIF 1	: IN: Input data format select.
pin 12: I DIF 2	: IN: Input data format select.
pin 13: C MODE 0	: IN: The clock mode select.
pin 14: C MODE 1	: IN: The clock mode select.
pin 15: C MODE 2	: IN: The clock mode select.
pin 16: O DIF 0	: IN: Output data format select.
pin 17: O DIF 1	: IN: Output data format select.
pin 18: SDT O	: O : The audio serial data output.
pin 19: O BI CK	: I/O: Bit clock input/output for the output signal.
pin 20: O LR CK	: I/O: Left/Right clock input/output for the output signal.
pin 21: MASTER CLK	: IN: Master clock input.
pin 22: T VDD	: - : Positive voltage supply for output-buffer.
pin 23: D VSS	: - : Digital ground.
pin 24: VDD	: - : Positive voltage supply.

Table 1. Master/Slave control

Cmode 2 (pin 15)	Cmode 1 (pin 14)	Cmode 0 (pin 13)	Master CLK (pin 21)	Master/Slave (Output port)
L	L	L	256fso(fso to 96kHz)	Master
L	L	H	384fso(fso to 96kHz)	Master
L	H	L	512fso(fso to 48kHz)	Master
L	H	H	768fso(fso to 48kHz)	Master
H	L	L	Connect to DVSS	Slave
H	H	H	Connect to DVSS	Master(bypass mode)

Table 2. Input Audio data Formats

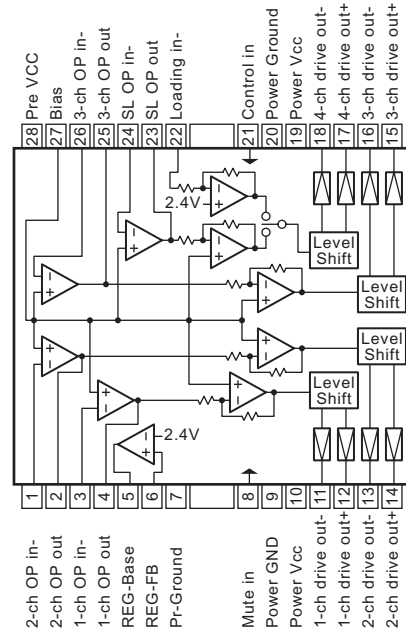
I DIF 2 (pin 12)	I DIF 1 (pin 11)	I DIF 0 (pin 10)	SDT I format (pin 9)	I BI CK (slave) (pin 8)
L	L	L	16bit LSB Justified	32 or less
L	L	H	20bit LSB Justified	40 or less
L	H	L	20bit MSB Justified	40 or less
L	H	H	20/16bit I2C compat.	32/40fs or less
H	L	L	24bit LSB Justified	48 or less

Table 3. Output Audio data Formats

O DIF 1 (pin 17)	O DIF 0 (pin 16)	SDT O format (pin 18)	O BI CK (Slave)	O BI CK (Master)
L	L	16bit LSB Justified	64fs	64fs
L	H	20bit LSB Justified	64fs	64fs
H	L	20/16bit MSB Justif.	32/40fs or less	64fs
H	H	20/16bit I2C compat.	32/40fs or less	64fs

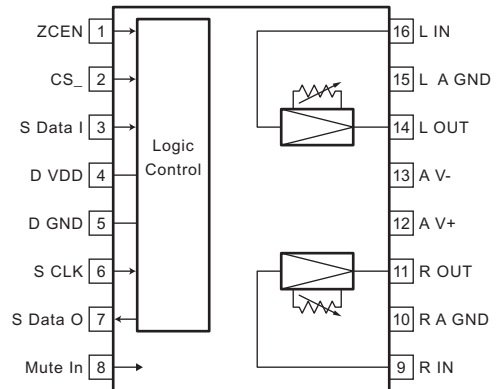
Table 4. De-emphasis filter control

DEM 1 (pin 6)	DEM 0 (pin 5)	De-emphasis filter
L	L	44.1kHz
L	H	off
H	L	48.0kHz
L	H	32.0kHz



Truth Table

MUTE (pin 9)	CNT (pin 21)	CH1,2,3 output	CH4 output
H	H	MUTE OFF	LD ON
H	L	MUTE OFF	SL ON
L	H	MUTE ON	LD ON
L	L	MUTE ON	MUTE ON



## Terminal Description

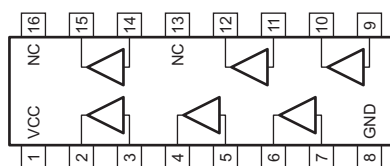
pin 1: ZCEN	: IN: Zero Cross Enable signal input.
pin 2: CS IN	: IN: The chip select command input.
pin 3: S DATA IN	: IN: The serial data input.
pin 4: D VDD	: - : Positive voltage supply for digital section.
pin 5: D GND	: - : Digital ground.
pin 6: S CLK	: IN: The serial clock input.
pin 7: S DATA OUT	: O : The serial data output.
pin 8: MUTE IN	: IN: Mute command input.
pin 9: R A IN	: IN: Right channel audio signal input.
pin 10: R A GND	: - : Right channel audio signal ground.
pin 11: R A OUT	: O : Right channel audio signal output.
pin 12: A V+	: - : Positive voltage supply for analog section.
pin 13: A V-	: - : Negative voltage supply for analog section.
pin 14: L A OUT	: O : Left channel audio signal output.
pin 15: L A GND	: - : Left channel audio signal ground.
pin 16: L A IN	: IN: Left channel audio signal input.

## Terminal Description

pin 1: A 11	:IN: Address signal input.
pin 2: A 9	:IN: Address signal input.
pin 3: A 8	:IN: Address signal input.
pin 4: A 13	:IN: Address signal input.
pin 5: WE_	:IN: Write enable signal input.
pin 6: CE 2	:IN: The chip enable signal input.
pin 7: A 15	:IN: Address signal input.
pin 8: VCC	: - : Positive voltage supply.
pin 9: NU	: - : Not in use.
pin 10: A 16	:IN: Address signal input.
pin 11: A 14	:IN: Address signal input.
pin 12: A 12	:IN: Address signal input.
pin 13: A 7	:IN: Address signal input.
pin 14: A 6	:IN: Address signal input.
pin 15: A 5	:IN: Address signal input.
pin 16: A 4	:IN: Address signal input.
pin 17: A 3	:IN: Address signal input.
pin 18: A 2	:IN: Address signal input.
pin 19: A 1	:IN: Address signal input.
pin 20: A 0	:IN: Address signal input.
pin 21: D 0	:I/O: Data input/output.
pin 22: D 1	:I/O: Data input/output.
pin 23: D 2	:I/O: Data input/output.
pin 24: GND	: - : Ground.
pin 25: D 3	:I/O: Data input/output.
pin 26: D 4	:I/O: Data input/output.
pin 27: D 5	:I/O: Data input/output.
pin 28: D 6	:I/O: Data input/output.
pin 29: D 7	:I/O: Data input/output.
pin 30: CE 1_	:IN: The chip enable signal input.
pin 31: A 10	:IN: Address signal input.
pin 32: OE_	:IN: Output enable signal input.

## Truth Table

WE_ (pin 5)	CE 1_ (pin 30)	CE 2 (pin 6)	OE_ (pin 32)	I/O Operation
x	H	x	x	High Z
x	x	L	x	High Z
H	L	H	H	High Z
H	L	H	L	data out
L	L	H	x	data in

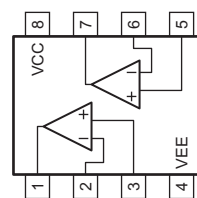
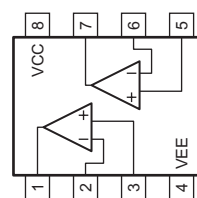


## Terminal Description

pin 1: Input(power source)
pin 2: Ground
pin 3: Output

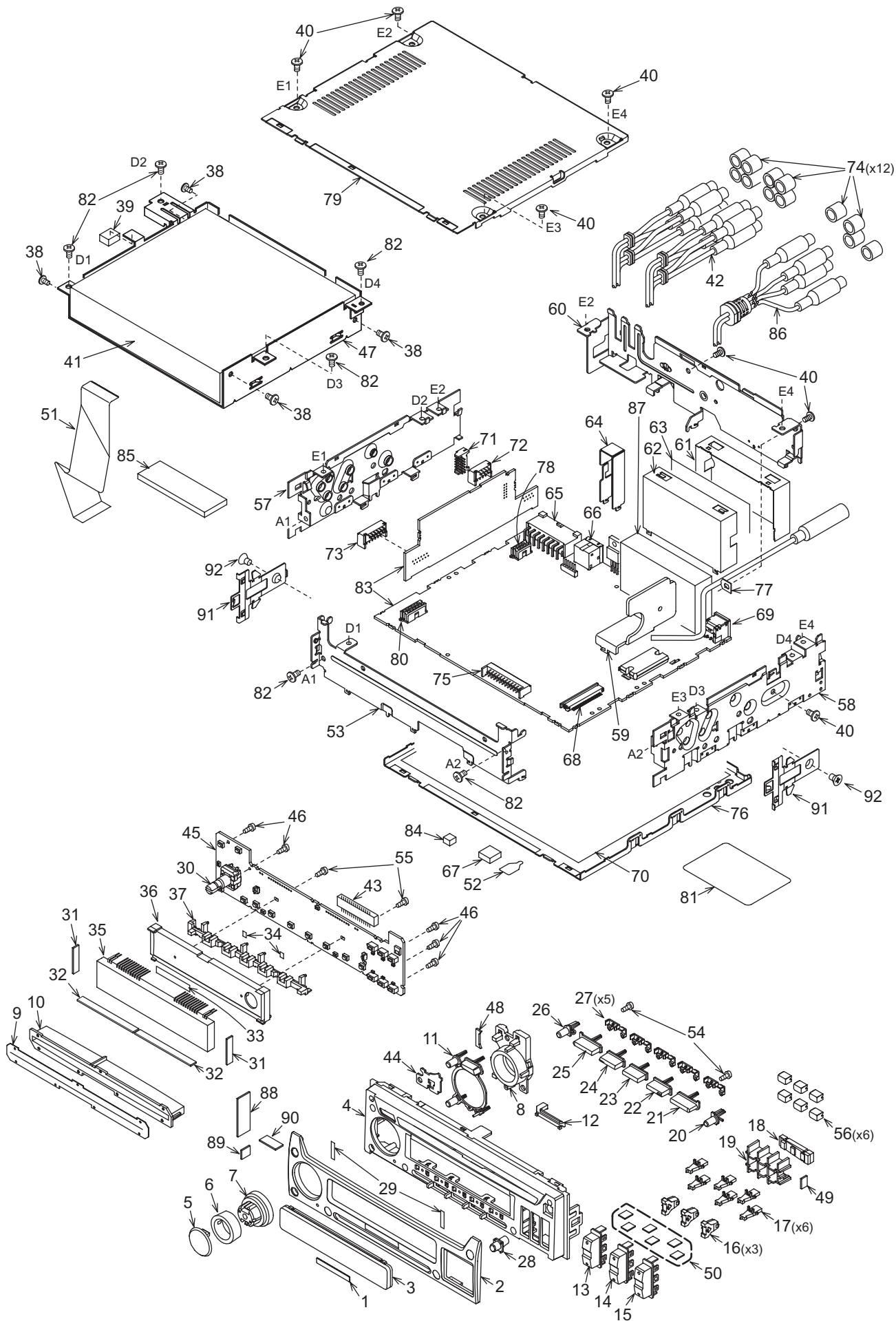
## Terminal Description

pin 1: ZERO L	: O : ZERO flag output for Left channel.
pin 2: ZERO R	: O : ZERO flag output for Right channel.
pin 3: M SEL	:IN: I2C/SPI_ select.
pin 4: LR CK IN	:IN: Left/Right clock input.
pin 5: DATA IN	:IN: Serial data input.
pin 6: B CK IN	:IN: Bit clock input.
pin 7: SCK	:IN: The system clock pulse input.
pin 8: D GND	: - : Digital ground.
pin 9: D VDD	: - : Positive voltage supply for the digital section.
pin 10: MS	:IN: Chip select for mode control.
pin 11: MDI	:IN: Mode control data input.
pin 12: MC	:IN: Mode control clock input.
pin 13: MD	: O : Mode control read back data output.
pin 14: RSTI	:IN: Reset signal input.
pin 15: A VCC	: - : Positive voltage supply for the internal analog section.
pin 16: A GND	: - : Analog ground.
pin 17: I out R+	: O : Right channel analog signal current output +.
pin 18: I out R-	: O : Right channel analog signal current output -.
pin 19: A GND	: - : Analog ground.
pin 20: Iref	: - : Output current bias.
pin 21: V com R	: - : Right channel internal bias.
pin 22: V com L	: - : Left channel internal bias.
pin 23: A VCC	: - : Positive voltage supply for the internal analog section.
pin 24: A GND	: - : Analog ground.
pin 25: I out L+	: O : Left channel analog signal current output +.
pin 26: I out L-	: O : Left channel analog signal current output -.
pin 27: A GND	: - : Analog ground.
pin 28: A VCC	: - : Positive voltage supply for the internal analog section.



EXPLODED VIEW / PARTS LIST

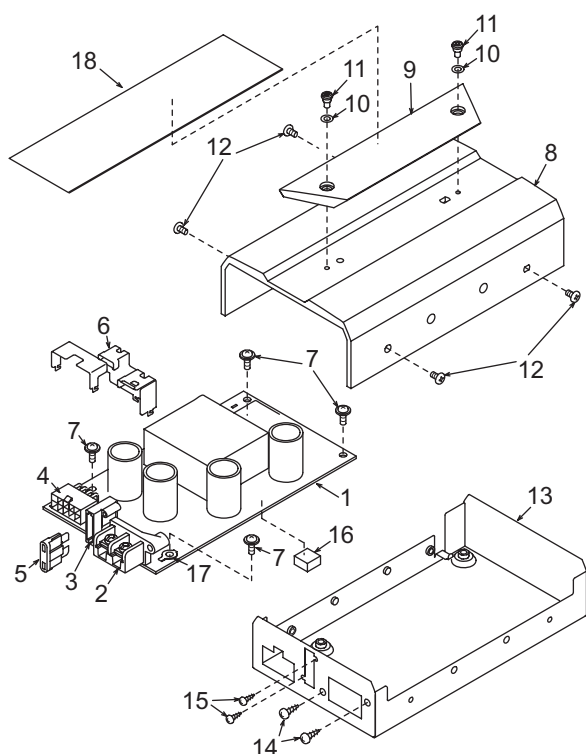
Main section



NO.	PART NO.	DESCRIPTION	Q'TY
1	378-0546-00 378-0547-00	BADGE(PE2628BA:DRZ9255) BADGE(PE2628KA:HX-D2)	1 1
2	371-5778-01 371-5778-00	FACE PANEL(PE2628BA) FACE PANEL(PE2628KA)	1 1
3	373-1036-00	DIAL COVER	1
4	370-6112-01	ESCUTCHEON	1
5	380-5591-00	KNOB CAP	1
6	345-5402-00	RUBBER RING	1
7	380-5592-00	INNER KNOB	1
8	335-7212-00	ILLUMI PLATE (L)	1
9	346-0163-00	LEATHER SHEET	1
10	371-5779-00	TRIM PLATE	1
11	382-6997-00	BUTTON (L)	1
12	335-7209-00	PACK ILLUMI	1
13	382-6998-00	BUTTON (1-4)	1
14	382-6999-00	BUTTON (2-5)	1
15	382-7000-00	BUTTON (3-6)	1
16	335-7219-00	BUTTON ILLUMI	3
17	335-7210-00	IND-ILLUMI	6
18	335-7211-00	ILLUMI PLATE	1
19	335-7213-00	BUTTON HOLDER	1
20	382-6995-00	BUTTON (P/A)	1
21	382-6994-00	BUTTON (BAND)	1
22	382-6993-00	BUTTON (>>)	1
23	382-6992-00	BUTTON (ENT)	1
24	382-6991-00	BUTTON (<<)	1
25	382-6990-00	BUTTON (FUNC)	1
26	382-6996-00	BUTTON (D)	1
27	335-7215-00	BUTTON HOLDER	5
28	335-7214-00	IR-FILTER	1
29	347-7383-00	DOUBLE FACE	2
30	016-0025-00	VR W/SHAFT	1
31	347-7384-00	SHADE FILM(R/L)	2
32	347-7385-00	SHADE FILM(VFD)	2
33	347-7386-00	DOUBLE FACE(VFD)	1
34	347-7387-00	DOUBLE FACE(ILLUMI)	2
35	379-4053-28	VFD	1
36	335-7216-00	VFD HOLDER	1
37	335-7218-00	ILLUMI PLATE (C)	1
38	714-2603-81	MACHINE SCREW (M2.6x3)	4
39	345-5798-00	CUSHION	1
40	716-0306-10	SCREW (M3x6)	7
41	929-0291-80	CD MECH MODULE	1
42	855-5505-00	RCA PIN CORD (8CH)	1
43	074-1105-22	OUTLET SOCKET	1
44	347-7408-00	SHADE FILM	1
45	覽覽 SWITCH	CH PWB	1
46	716-0872-01	PAD SCREW (M1.7x5)	5
47	331-3775-00	MECH BRACKET	1
48	347-7380-00	SHADE FILM (L)	1
49	347-7382-00	SHADE FILM (R)	1

NO.	PART NO.	DESCRIPTION	Q'TY
50	347-7379-00	SHADE FILM (PRESET)	6
51	816-4004-00	FLAT WIRE	1
52	347-7376-00	E-SHEET	1
53	309-0798-00	FRONT PLATE	1
54	714-2004-81	MACHINE SCREW (M2x4)	2
55	716-0872-11	SCREW (M1.7x6)	2
56	345-5140-00	RUBBER SPACER	6
57	305-0248-02	SIDE COVER (L)	1
58	305-0249-02	SIDE COVER (R)	1
59	313-1895-00	HEAT SINK	1
60	307-0702-00	REAR COVER	1
61	331-2946-00	SHIELD COVER (R)	1
62	331-2945-00	SHIELD COVER (F)	1
63	347-7377-00	INSULATOR	1
64	313-1781-00	HEAT SINK	1
65	074-1023-16	OUTLET SOCKET (POWER)	1
66	074-1194-00	OUTLET SOCKET (Ce NET)	1
67	345-5796-00	CUSHION	1
68	074-1138-76	OUTLET SOCKET	1
69	075-0385-10	JACK (OPTICAL-IN)	1
70	347-7375-00	INSULATOR	1
71	076-6002-12	PLUG	1
72	076-0515-08	PLUG (8P)	1
73	076-0515-12	PLUG (12P)	1
74	345-3799-01	RUBBER PART	12
75	076-0515-22	PLUG	1
76	304-0470-01	LOWER COVER	1
77	092-2214-00	ANT-RECEPT	1
78	074-1106-08	OUTLET SOCKET	1
79	303-0458-08	UPPER COVER	1
80	074-1106-12	OUTLET SOCKET	1
81	286-6456-00 286-6457-00	SETPLATE(PE2629BA) SETPLATE(PE2629KA)	1 1
82	714-3006-81	MACHINE SCREW (M3x6)	6
83	覽覽 MAIN PWB		1
84	345-5795-00	CUSHION	1
85	345-5797-00	HEAT RUBBER	1
86	855-5500-00	RCA PIN CORD (4CH)	1
87	880-2090B	TUNER PACK	1
88	347-7415-00	FILM	1
89	347-7416-00	FILM	1
90	347-7417-00	FILM	1
91	750-2796-02	SPRING	2
92	714-5008-41	MACHINE SCREW	2

## DC-DC converter(EE-1236B-A) section



NO.	PART NO.	DESCRIPTION	Q'TY
1	-----	DC/DC PWB	1
2	073-0722-01	TERMINAL (BATT/GND)	1
3	077-0091-00	FUSE-RECEPT	1
4	074-0884-02	OUTLET SOCKET (10P)	1
5	060-0057-54	AUTO FUSE(5A)	1
6	331-3776-00	CONECTOR HOLDER	1
7	716-0821-02	IT SCREW	4
8	303-0487-00	UPPER COVER	1
9	383-0715-01	DECORATE PANEL	1
10	345-5443-00	O-RING	2
11	716-3521-00	LOCK SCREW (M3X4)	2
12	714-3006-89	MACHINE SCREW (M3X6)	4
13	311-1886-01	LOWER COVER	1
14	702-3008-89	TAP SCREW	2
15	702-2006-19	TAP SCREW	2
16	345-5444-00	SPACER	1
17	073-0731-01	TERMINAL	1
18	347-7378-00	PROTECT SHEET	1

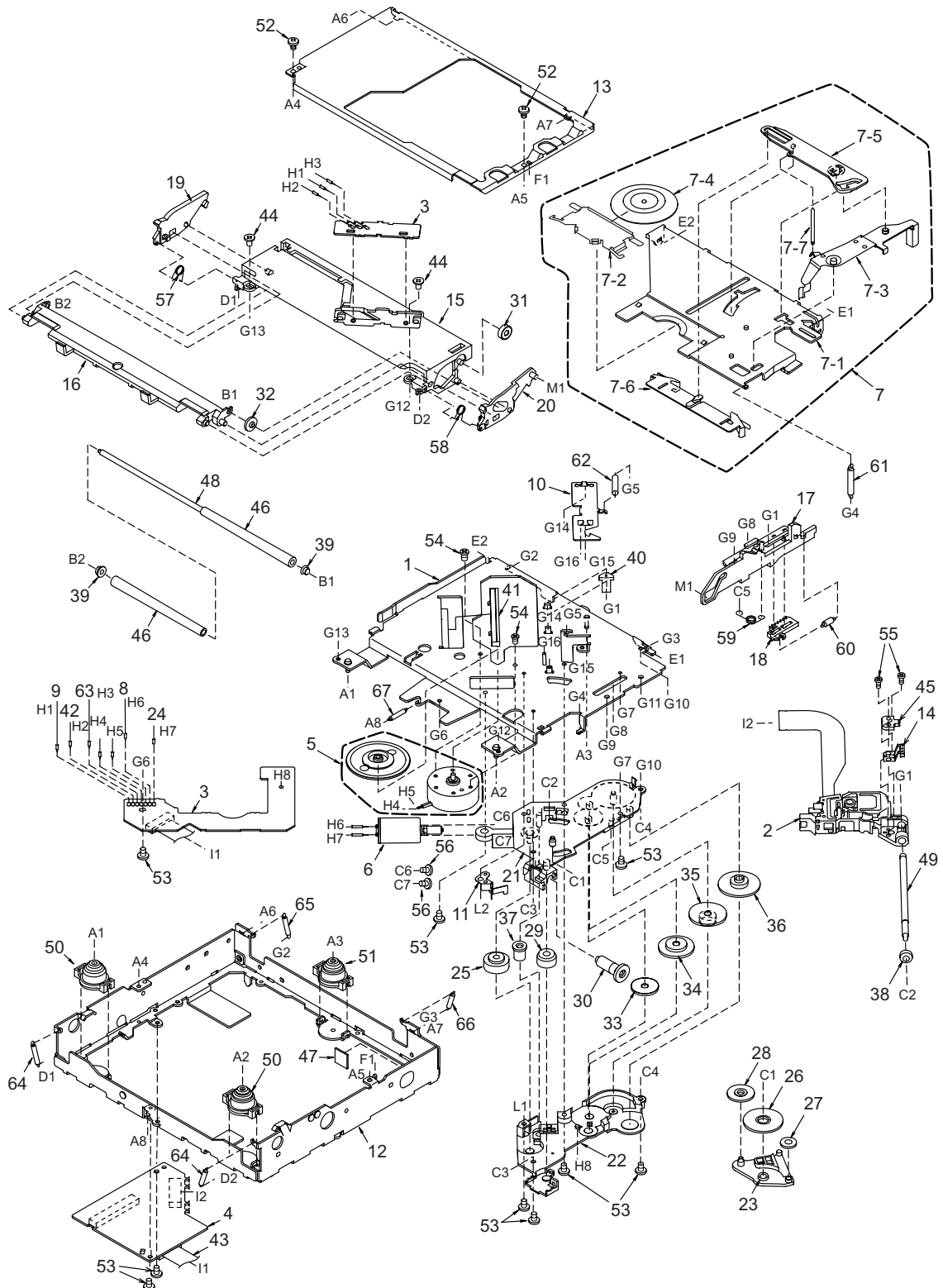
## CD mechanism(929-0291-80) section

NO.	PART NO.	DESCRIPTION	Q'TY
1	966-0595-25	DRIVE PLATE ASSY	1
2	969-0065-31	PICK UP UNIT	1
3	-----	LED PWB	1
4	-----	CD PWB	1
5	SMA-182-100	MOTOR ASSY(SPINDLE)	1
6	SMA-183-100	MOTOR ASSY(SLED)	1
7	HBS-524-100	CLAMPER SUB ASSY	1
7-1	620-1022-25	CLAMPER LINK	1
7-2	620-1023-23	CLAMPER PLATE	1
7-3	620-1024-23	SENSOR ARM	1
7-4	621-0708-20	CLAMPER RING	1
7-5	621-0626-21	STOPPER LINK	1
7-6	621-0627-21	DISC STOPPER	1
7-7	750-3471-20	SENSOR SPRING	1
8	803-4906-60	VINYL COAT WIRE(ORG)	1
9	816-2591-00	LEAD WIRE(YEL)	1
10	620-1025-22	ID-LOCK PLATE	1
11	620-1026-21	SPRING PLATE	1
12	620-1027-27	LOWER CHASSIS	1
13	620-1028-23	UPPER CHASSIS	1
14	966-0638-20	SH-RACK ASSY	1
15	621-0598-27	UPPER GUIDE	1
16	621-0599-26	ROLLER GUIDE	1
17	621-0600-26	SHIFT LEVER	1
18	621-0601-21	RACK	1
19	621-0602-22	LOCK ARM L	1

NO.	PART NO.	DESCRIPTION	Q'TY
20	621-0603-25	LOCK ARM R	1
21	621-0724-21	GEAR BASE	1
22	621-0605-22	GEAR COVER	1
23	621-0723-20	IDLE CASE	1
24	816-2590-00	VINYL COAT WIRE(GRN)	1
25	621-0608-21	SECOND GEAR	1
26	621-0609-20	BASE GEAR	1
27	621-0610-20	IDLE GEAR A	1
28	621-0611-20	IDLE GEAR B	1
29	621-0612-21	ROLLER GEAR A	1
30	621-0719-20	ROLLER GEAR B	1
31	621-0720-20	ROLLER GEAR C	1
32	621-0721-20	ROLLER GEAR D	1
33	621-0616-20	POWER GEAR A	1
34	621-0617-20	POWER GEAR B	1
35	621-0618-20	POWER GEAR C	1
36	621-0619-20	POWER GEAR D	1
37	621-0620-20	THREAD GEAR A	1
38	621-0621-20	THREAD GEAR B	1
39	621-0622-21	ROLLER SLEEVE	2
40	621-0623-23	LS-HOLDER	1
41	621-0624-22	GUIDE RAIL	1
42	816-2593-00	LEAD WIRE(PUR)	1
43	816-2542-01	FLAT WIRE(10P)	1
44	716-3473-00	IT SCREW(M2 x 3)	2
45	621-0709-20	SH-BASE	1



NO.	PART NO.	DESCRIPTION	Q'TY	NO.	PART NO.	DESCRIPTION	Q'TY
46	621-0629-20	LOADING ROLLER	2	57	750-3465-21	ROLLER SPRING L	1
47	345-8704-20	CUSHION RUBBER	1	58	750-3466-20	ROLLER SPRING R	1
48	622-1571-21	ROLLER SHAFT	1	59	750-3467-21	SHIFT SPRING	1
49	624-0018-01	LEAD SCREW	1	60	750-3468-20	RACK SPRING	1
50	629-0081-20	DAMPER F	2	61	750-3469-20	CLAMPER SPRING	1
51	629-0082-20	DAMPER R	1	62	750-3470-20	ID-LOCK SPRING	1
52	714-2003-81	MACHINE SCREW(M2 x 3)	2	63	816-2592-00	LEAD WIRE(BLU)	1
53	716-1507-00	SCREW(M2 x 3)	9	64	750-3472-21	DR-SPRING F	2
54	716-1733-00	SCREW(M1.7 x 2.3)	2	65	750-3473-20	DR-SPRING RA	1
55	716-3469-00	SCREW( 3 x 4)	2	66	750-3474-20	DR-SPRING RB	1
56	716-3446-00	SCREW(M1.4 x 2.5)	2	67	750-3475-21	DR-SPRING C	1



# ELECTRICAL PARTS LIST

## Main PWB(B1) section

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
BL1	880-2090B	TUNER PACK	C310	042-0654-52	16V 10uF	C423	166-2211-50	220pF CH
C1	168-2232-55	0.022uF K	C311	166-3301-50	33pF CH	C424	166-1211-50	12pF CH
C2	163-2263-35	16V22uF	C312	166-3301-50	33pF CH	C425	166-2211-50	220pF CH
C4	163-1053-65	50V1uF	C313	166-3301-50	33pF CH	C426	166-2211-50	220pF CH
C5	168-3332-78	0.033uF K	C314	166-3301-50	33pF CH	C427	166-2211-50	220pF CH
C6	168-3332-78	0.033uF K	C315	166-3301-50	33pF CH	C428	166-1211-50	12pF CH
C7	187-4763-35	16V47uF	C316	166-3301-50	33pF CH	C429	166-2211-50	220pF CH
C8	168-2232-55	0.022uF K	C317	166-3301-50	33pF CH	C430	166-2211-50	220pF CH
C9	168-2232-55	0.022uF K	C318	166-3301-50	33pF CH	C431	166-2211-50	220pF CH
C10	168-6822-55	6800pF K	C319	163-2253-65	50V2.2uF	C432	166-1211-50	12pF CH
C11	042-1631-50	10V100uF	C320	163-2253-65	50V2.2uF	C433	166-2211-50	220pF CH
C12	042-1631-50	10V100uF	C321	163-2253-65	50V2.2uF	C434	166-2211-50	220pF CH
C13	168-1032-55	0.01uF K	C322	163-2253-65	50V2.2uF	C435	166-2211-50	220pF CH
C14	168-1532-55	0.015uF K	C323	187-1073-35	16V 100uF	C436	166-1211-50	12pF CH
C16	168-1032-55	0.01uF K	C324	168-1042-78	16V 0.1uF	C437	168-1042-78	16V 0.1uF
C18	163-3353-65	50V3.3uF	C325	042-0654-52	16V 10uF	C439	168-1022-55	1000pF K (PE2628KA)
C20	163-4763-15	6.3V47uF	C326	042-0654-52	16V 10uF	C440	042-0654-50	6.3V 22uF
C21	166-1011-50	100pF CH	C327	042-0654-52	16V 10uF	C441	042-0654-50	6.3V 22uF
C22	166-1011-50	100pF CH	C328	042-0654-52	16V 10uF	C442	042-0654-50	6.3V 22uF
C23	166-1011-50	100pF CH	C329	042-0654-52	16V 10uF	C443	042-0654-50	6.3V 22uF
C24	166-3311-50	330pF CH	C330	042-0654-52	16V 10uF	C449	168-1032-55	0.01uF K
C25	166-1801-50	18pF CH	C331	042-0654-52	16V 10uF	C450	168-1032-55	0.01uF K
C26	166-1501-50	15pF CH	C332	168-1042-78	16V 0.1uF	C451	168-1032-55	0.01uF K
C27	163-2253-65	50V2.2uF	C333	042-0654-52	16V 10uF	C452	168-1032-55	0.01uF K
C28	163-2253-65	50V2.2uF	C334	168-1042-78	16V 0.1uF	C453	168-1032-55	0.01uF K
C29	168-2232-55	0.022uF K	C335	168-1042-78	16V 0.1uF	C454	168-1032-55	0.01uF K
C55	166-2201-50	22pF CH	C336	163-1053-65	50V1uF	C455	168-1032-55	0.01uF K
C66	166-2201-50	22pF CH	C337	163-1053-65	50V1uF	C456	168-1032-55	0.01uF K
C67	168-1032-55	0.01uF K	C338	163-1053-65	50V1uF	C457	168-1032-55	0.01uF K
C68	168-1032-55	0.01uF K	C339	163-1053-65	50V1uF	C458	168-1032-55	0.01uF K
C200	187-1073-35	16V 100uF	C340	163-2263-35	16V22uF	C459	168-1032-55	0.01uF K
C201	187-1073-35	16V 100uF	C341	178-4742-78	0.47uF	C460	168-1032-55	0.01uF K
C203	187-1063-35	16V 10uF	C342	042-0423-97	16V10uF	C461	168-1032-55	0.01uF K
C204	042-9129-00	16V270uF	C343	042-0654-52	16V 10uF	C462	168-1032-55	0.01uF K
C205	187-4763-35	16V47uF	C344	042-0654-52	16V 10uF	C463	168-1032-55	0.01uF K
C206	042-1549-12	16V220uF	C345	042-0654-52	16V 10uF	C464	168-1032-55	0.01uF K
C207	187-1063-35	16V 10uF	C346	042-0654-52	16V 10uF	C465	042-1505-89	10V10uF(OS)
C208	042-1549-12	16V220uF	C347	166-3301-50	33pF CH	C466	042-1505-89	10V10uF(OS)
C210	163-2263-35	16V22uF	C348	166-3301-50	33pF CH	C467	042-1505-89	10V10uF(OS)
C211	187-4763-35	16V47uF	C349	166-3301-50	33pF CH	C468	042-1505-89	10V10uF(OS)
C212	042-1631-50	10V100uF	C350	166-3301-50	33pF CH	C469	168-1032-55	0.01uF K
C213	042-1631-50	10V100uF	C351	042-0654-52	16V 10uF	C470	168-1032-55	0.01uF K
C214	163-1063-35	16V10uF	C352	042-0654-52	16V 10uF	C471	168-1032-55	0.01uF K
C215	168-1032-55	0.01uF K	C353	042-0654-52	16V 10uF	C472	168-1032-55	0.01uF K
C216	042-1631-50	10V100uF	C354	042-0654-52	16V 10uF	C473	168-1032-55	0.01uF K
C217	163-2263-35	16V22uF	C355	168-1032-55	0.01uF K	C474	168-1032-55	0.01uF K
C218	172-2231-15	0.022uF	C356	168-1032-55	0.01uF K	C475	042-1505-89	10V10uF(OS)
C219	168-1022-55	1000pF K	C357	168-1032-55	0.01uF K	C476	042-1505-89	10V10uF(OS)
C220	168-1042-78	16V 0.1uF	C358	168-1032-55	0.01uF K	C477	042-1505-89	10V10uF(OS)
C221	187-1063-65	50V10uF	C359	168-1022-55	1000pF K	C478	042-1505-89	10V10uF(OS)
C222	168-1022-55	1000pF K	C360	166-1011-50	100pF CH	C479	168-1032-55	0.01uF K
C223	043-0318-90	5600pF	C401	043-0264-51	2200pF	C480	168-1032-55	0.01uF K
C224	166-1011-50	100pF CH	C402	043-0264-51	2200pF	C481	042-1547-00	16V22uF
C225	168-1032-55	0.01uF K	C403	043-0264-51	2200pF	C482	042-1547-00	16V22uF
C226	168-1032-55	0.01uF K	C404	043-0264-51	2200pF	C483	042-1547-00	16V22uF
C227	168-1022-55	1000pF K	C405	043-0264-51	2200pF	C484	042-1547-00	16V22uF
C228	168-1022-55	1000pF K	C406	043-0264-51	2200pF	C485	042-1547-00	16V22uF
C229	168-1032-55	0.01uF K	C407	043-0264-51	2200pF	C486	042-1547-00	16V22uF
C230	168-1022-55	1000pF K (PE2628KA)	C408	043-0264-51	2200pF	C487	042-1563-68	16V22uF
C231	168-1011-50	100pF CH (PE2628KA)	C409	043-0264-51	2200pF	C488	042-1563-68	16V22uF
C233	168-1022-55	1000pF K (PE2628KA)	C410	043-0264-51	2200pF	C489	168-1032-55	0.01uF K
C301	168-4732-78	0.047uF K	C411	043-0264-51	2200pF	C491	042-1547-00	16V22uF
C302	168-4732-78	0.047uF K	C412	043-0264-51	2200pF	C492	042-1547-00	16V22uF
C303	042-0654-52	16V 10uF	C413	173-5611-18	560pF J	C493	168-1032-55	0.01uF K
C304	042-0654-52	16V 10uF	C414	173-5611-18	560pF J	C600	168-1032-55	0.01uF K
C305	042-0654-52	16V 10uF	C415	173-5611-18	560pF J	C601	042-1576-01	5.5V0.22uF
C306	042-0654-52	16V 10uF	C416	173-5611-18	560pF J	C603	168-1032-55	0.01uF K
C307	042-0654-52	16V 10uF	C417	173-5611-18	560pF J	C605	042-1577-00	6.3V100uF
C308	042-0654-52	16V 10uF	C418	173-5611-18	560pF J	C609	168-4732-78	0.047uF K
C309	042-0654-52	16V 10uF	C419	166-5611-50	560pF CH	C612	163-1063-35	16V10uF
			C420	166-5611-50	560pF CH	C615	168-1032-55	0.01uF K
			C421	166-2211-50	220pF CH	C900	168-1032-55	0.01uF K
			C422	166-2211-50	220pF CH			

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
C901	168-1042-78	16V 0.1uF	C983	166-2211-50	220pF CH (PE2628BA)	IC304	051-3034-90	NJM4558V
C902	042-0423-20	10V10uF				IC305	051-7232-08	74VHC4066M
C903	042-0423-20	10V10uF	C984	168-1032-55	0.01uF K	IC306	051-3026-90	NJM4580V
C904	168-1042-78	16V 0.1uF	C986	168-1022-55	1000pF K	IC307	051-3026-90	NJM4580V
C905	166-8096-50	8pF D CH	C987	168-1032-55	0.01uF K	IC401	051-3042-90	OPA2134UA
C906	166-8096-50	8pF D CH	C988	168-1032-55	0.01uF K	IC402	051-3042-90	OPA2134UA
C908	168-1042-78	16V 0.1uF	C989	168-1032-55	0.01uF K	IC403	051-3042-90	OPA2134UA
C909	168-1042-78	16V 0.1uF	C9005	168-1032-55	0.01uF K	IC404	051-3042-90	OPA2134UA
C910	163-1063-35	16V10uF	C9006	168-1032-55	0.01uF K	IC405	051-3042-90	OPA2134UA
C911	168-1042-78	16V 0.1uF	CCT901	010-3042-54	BLA3216A601 SG4T1	IC406	051-3042-90	OPA2134UA
C912	168-1042-78	16V 0.1uF				IC407	051-3042-90	OPA2134UA
C913	168-1042-78	16V 0.1uF	CCT902	010-3042-54	BLA3216A601 SG4T1	IC408	051-3042-90	OPA2134UA
C914	168-1022-55	1000pF K				IC409	051-3042-90	OPA2134UA
C915	042-0423-94	10V 4.7uF	CCT903	010-3042-54	BLA3216A601 SG4T1	IC410	051-3012-90	OP275GS
C916	168-1042-78	16V 0.1uF				IC418	051-5036-90	PGA2310UA
C917	163-1063-35	16V10uF	CCT904	010-3042-54	BLA3216A601 SG4T1	IC419	051-5036-90	PGA2310UA
C918	168-1042-78	16V 0.1uF				IC420	051-5036-90	PGA2310UA
C919	042-0423-20	10V10uF	CCT905	010-3042-54	BLA3216A601 SG4T1	IC421	051-5036-90	PGA2310UA
C920	042-0423-97	16V10uF				IC600	052-3393-00	M30622MEP-161GP
C921	042-0423-20	10V10uF	CCT906	010-3042-54	BLA3216A601 SG4T1	IC601	051-5437-08	S-80821ANMP-EDJ-E2
C922	168-1042-78	16V 0.1uF						
C923	168-1042-78	16V 0.1uF	CCT907	010-3042-54	BLA3216A601 SG4T1	IC602	051-6600-58	HA12187FP
C924	042-0423-20	10V10uF				IC901	051-7221-58	SN74AHC1G04 HDCKR
C925	168-1042-78	16V 0.1uF	D201	001-0529-68	MA8180-L			
C926	168-1042-78	16V 0.1uF	D202	001-0516-90	MA111	IC902	051-7243-48	SN74AHCT1G08 DCKR
C927	168-1042-78	16V 0.1uF	D203	001-0516-90	MA111			
C928	166-1011-50	100pF CH	D205	001-0516-90	MA111	IC903	051-6373-18	AK4112BVF-E2
C929	168-6822-55	6800pF K	D206	001-0516-90	MA111	IC905	051-7221-58	SN74AHC1G04 HDCKR
C930	168-1042-78	16V 0.1uF	D207	001-0516-90	MA111			
C931	042-0423-20	10V10uF	D208	001-0516-90	MA111	IC906	051-7269-08	SN74AHC2G53 HDCTR
C932	042-0423-20	10V10uF	D209	001-0466-91	S5688G			
C933	168-1042-78	16V 0.1uF	D210	001-0466-91	S5688G	IC907	051-7285-08	CD74HC4050PWR
C934	168-1042-78	16V 0.1uF	D215	001-0529-32	MA8056-M	IC909	051-6709-90	PCM1792DBR
C935	042-0423-20	10V10uF	D219	001-0529-14	MA8030-L	IC910	051-6709-90	PCM1792DBR
C936	168-1032-55	0.01uF K	D301	001-0516-90	MA111	IC911	051-6709-90	PCM1792DBR
C937	168-1022-55	1000pF K	D302	001-0516-90	MA111	IC912	051-6620-08	TC9246F
C938	178-4742-78	0.47uF	D303	001-0516-90	MA111	IC913	051-6705-00	AK7720A
C939	168-1042-78	16V 0.1uF	D311	001-0529-44	MA8082-M	IC915	051-6708-90	AK4121VF-E2
C940	168-1022-55	1000pF K	D350	001-0516-90	MA111	IC916	051-9126-00	BS62LV1024STI-70
C941	042-0423-20	10V10uF	D351	001-0516-90	MA111	IC918	051-3232-90	uPC29M33T
C942	168-1042-78	16V 0.1uF	D352	001-0516-90	MA111	J200	074-1023-16	16P
C943	168-1032-55	0.01uF K	D353	001-0516-90	MA111	J401	074-1106-08	8P
C944	168-1032-55	0.01uF K	D450	001-0529-38	MA8068-M	J402	074-1106-12	12P
C945	042-0423-20	10V10uF	D451	001-0516-90	MA111	J600	074-1194-00	13P CE-NET
C946	168-1042-78	16V 0.1uF	D452	001-0529-38	MA8068-M	J602	074-1138-76	26P
C947	168-1042-78	16V 0.1uF	D453	001-0516-90	MA111	J901	075-0385-10	OPT JACK
C948	168-1042-78	16V 0.1uF	D454	001-0529-38	MA8068-M	JW1	119-0000-05	1/10W 0 ohm JW
C949	042-0632-50	6.3V47uF	D455	001-0516-90	MA111	JW2	119-0000-05	1/10W 0 ohm JW
C950	042-0632-50	6.3V47uF	D456	001-0529-38	MA8068-M	JW3	119-0000-05	1/10W 0 ohm JW
C951	042-0632-50	6.3V47uF	D600	001-0516-90	MA111	L1	010-2275-53	220uH
C952	168-1042-78	16V 0.1uF	D601	001-0516-90	MA111	L2	010-3103-64	MMZ1608Y1
C953	168-1042-78	16V 0.1uF	D602	001-0516-90	MA111	L3	010-3103-64	MMZ1608Y1
C954	168-1042-78	16V 0.1uF	D603	001-0529-32	MA8056-M	L4	010-3406-54	2.2uH
C955	168-1042-78	16V 0.1uF	D604	001-0529-32	MA8056-M	L5	010-3406-54	2.2uH
C956	168-1042-78	16V 0.1uF	D901	001-0516-90	MA111	L52	010-4046-00	30uH
C957	168-1042-78	16V 0.1uF	D902	001-0516-90	MA111	L230	119-0000-05	1/10W 0 ohm JW (PE2629BA)
C958	042-0632-50	6.3V47uF	D903	001-0535-90	MA729			
C959	042-0632-50	6.3V47uF	D904	001-0535-90	MA729	L230	010-3103-64	MMZ1608Y1 (PE2629KA)
C960	042-0632-50	6.3V47uF	D905	001-0535-90	MA729			
C961	168-1032-55	0.01uF K	D906	001-0535-90	MA729	L301	010-3406-66	22uH
C962	042-0592-58	16V10uF	D907	001-0535-90	MA729	L302	010-3406-66	22uH
C963	042-0423-97	16V10uF	D908	001-0535-90	MA729	L310	010-3103-64	MMZ1608Y1
C964	042-0592-58	16V10uF	D909	001-0535-90	MA729	L311	010-3103-64	MMZ1608Y1
C965	042-0592-58	16V10uF	D910	001-0535-90	MA729	L490	010-2326-00	BL02RN2-R62
C966	042-0423-97	16V10uF	FIL901	060-3110-90	NFM4516P13C204 FBI	L601	010-3406-54	2.2uH
C967	042-0592-58	16V10uF				L902	010-3103-64	MMZ1608Y1
C968	042-0592-58	16V10uF	FIL902	060-3110-90	NFM4516P13C204 FBI	L903	010-3103-64	MMZ1608Y1
C969	042-0423-97	16V10uF				L904	010-3103-64	MMZ1608Y1
C970	042-0592-58	16V10uF	FIL903	060-3110-90	NFM4516P13C204 FBI	L905	010-3103-64	MMZ1608Y1
C975	166-1011-50	100pF CH (PE2628BA)	FIL904	060-3110-90	NFM4516P13C204 FBI	L906	010-3103-64	MMZ1608Y1
C977	166-1011-50	100pF CH				L907	010-3103-64	MMZ1608Y1
C978	168-1032-55	0.01uF K	IC1	051-6212-08	LC72191JM-TLM	L908	010-3103-64	MMZ1608Y1
C979	166-1011-50	100pF CH	IC200	051-3297-10	BA4916-V2	L910	010-3103-64	MMZ1608Y1
C980	168-1022-55	1000pF K	IC301	051-3026-90	NJM4580V	L911	010-3406-62	10uH
C981	168-1022-55	1000pF K	IC302	051-3026-90	NJM4580V	L913	010-3103-64	MMZ1608Y1
C982	168-1032-55	0.01uF K	IC303	051-5020-90	M61508FP	L914	010-3103-64	MMZ1608Y1
						L915	010-3103-64	MMZ1608Y1

REF No.	PART No.	DESCRIPTION
L916	010-3406-66	22uH
L917	010-2285-58	BLM21A102FPB
L918	010-3103-64	MMZ1608Y1
L919	010-3103-64	MMZ1608Y1
L920	010-3103-64	MMZ1608Y1
L921	010-3103-64	MMZ1608Y1
L922	010-3103-64	MMZ1608Y1
L923	010-3103-64	MMZ1608Y1
L924	010-3103-64	MMZ1608Y1
L925	010-3103-64	MMZ1608Y1
L926	010-3103-64	MMZ1608Y1
L927	010-3103-64	MMZ1608Y1
L928	010-3103-64	MMZ1608Y1
L929	010-3103-64	MMZ1608Y1
L930	010-3103-64	MMZ1608Y1
L931	010-3103-64	MMZ1608Y1
L932	010-3103-64	MMZ1608Y1
L933	010-3103-64	MMZ1608Y1
L934	010-3103-64	MMZ1608Y1
L935	010-3103-64	MMZ1608Y1
L936	010-3103-64	MMZ1608Y1
L937	010-3103-64	MMZ1608Y1
L938	010-3103-64	MMZ1608Y1
L939	010-3103-64	MMZ1608Y1
L940	010-3103-64	MMZ1608Y1
L941	010-3103-64	MMZ1608Y1
L942	010-3103-64	MMZ1608Y1
L946	010-3103-64	MMZ1608Y1
L947	010-3103-64	MMZ1608Y1
L948	010-3103-64	MMZ1608Y1
L949	010-3103-64	MMZ1608Y1
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L951	010-3103-64	MMZ1608Y1
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L962	010-3103-64	MMZ1608Y1
L963	010-3103-64	MMZ1608Y1
L964	010-3103-64	MMZ1608Y1
L965	010-3103-64	MMZ1608Y1
L966	010-3103-64	MMZ1608Y1
P1	076-0515-22	22P
P401	076-0515-08	8P
P402	076-0515-12	12P
P501	076-6002-12	PLUG
Q1	192-2712-51	2SC2712G,L
Q2	192-2712-51	2SC2712G,L
Q3	193-1858-00	2SD1858
Q4	125-2004-93	RN1403
Q5	190-1162-00	2SA1162
Q6	190-1162-00	2SA1162
Q7	190-1162-00	2SA1162
Q201	125-2004-96	RN1406
Q202	190-1298-00	2SA1298
Q203	192-2712-00	2SC2712
Q204	190-1162-00	2SA1162
Q205	190-1162-00	2SA1162
Q207	192-2712-00	2SC2712
Q215	103-2012-00	2SD2012
Q216	125-2004-93	RN1403
Q217	191-1237-00	2SB1237
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Q220	125-2004-93	RN1403
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Q234	125-0002-92	RN2402
Q235	193-1802-60	2SD1802FA-R.S.T
Q236	125-2004-92	RN1402
Q238	125-0013-97	RN2427
Q239	125-2004-92	RN1402

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Q240	125-2004-96	RN1406
Q300	125-2004-93	RN1403
Q301	125-2004-96	RN1406
Q302	192-2712-00	2SC2712
Q303	125-2004-92	RN1402
Q413	193-1328-00	2SD1328
Q414	193-1328-00	2SD1328
Q415	193-1328-00	2SD1328
Q416	193-1328-00	2SD1328
Q417	193-1328-00	2SD1328
Q418	125-0002-92	RN2402
Q419	193-1328-00	2SD1328
Q420	125-0002-92	RN2402
Q421	193-1328-00	2SD1328
Q422	193-1328-00	2SD1328
Q600	125-2004-92	RN1402
Q601	125-2004-93	RN1403
Q602	125-2004-93	RN1403
Q603	190-1162-00	2SA1162
Q604	125-0002-92	RN2402
Q605	125-2004-93	RN1403
Q606	125-2004-93	RN1403
Q901	125-2004-92	RN1402
Q902	125-2004-93	RN1403
Q903	125-2004-92	RN1402
Q904	125-2004-92	RN1402
R1	119-1021-15	1/10W 1k ohm
R2	119-3311-15	1/10W 330 ohm
R3	119-4721-15	1/10W 4.7k ohm
R4	119-4721-15	1/10W 4.7k ohm
R5	119-1231-15	1/10W 12k ohm
R6	119-1231-15	1/10W 12k ohm
R7	119-1231-15	1/10W 12k ohm
R9	119-4741-15	1/10W 470k ohm
R10	119-2221-15	1/10W 2.2k ohm
R14	119-5631-15	1/10W 56k ohm
R15	119-1031-15	1/10W 10k ohm
R16	119-2221-15	1/10W 2.2k ohm
R17	119-1521-15	1/10W 1.5k ohm
R18	119-1031-15	1/10W 10k ohm
R19	119-1031-15	1/10W 10k ohm
R20	119-1031-15	1/10W 10k ohm
R21	119-1021-15	1/10W 1k ohm
R24	119-1521-15	1/10W 1.5k ohm
R25	119-1521-15	1/10W 1.5k ohm
R27	119-1021-15	1/10W 1k ohm
R28	119-1021-15	1/10W 1k ohm
R29	119-1021-15	1/10W 1k ohm
R30	119-1041-15	1/10W 100k ohm
R83	119-1021-15	1/10W 1k ohm
R200	119-1041-15	1/10W 100k ohm
R201	119-1041-15	1/10W 100k ohm
R202	119-5621-15	1/10W 5.6k ohm
R203	119-4731-15	1/10W 47k ohm
R204	119-5631-15	1/10W 56k ohm
R205	119-1031-15	1/10W 10k ohm
R206	119-1031-15	1/10W 10k ohm
R207	119-1021-15	1/10W 1k ohm
R209	119-1531-15	1/10W 15k ohm
R210	119-1031-15	1/10W 10k ohm
R211	119-4731-15	1/10W 47k ohm
R212	119-4721-15	1/10W 4.7k ohm
R213	119-2221-15	1/10W 2.2k ohm
R216	119-1021-15	1/10W 1k ohm
R217	119-2231-15	1/10W 22k ohm
R224	119-4701-15	1/10W 47 ohm
R225	119-1031-15	1/10W 10k ohm
R226	116-1221-15	1/4W 1.2k ohm
R227	119-1031-15	1/10W 10k ohm
R228	116-1221-15	1/4W 1.2k ohm
R229	116-1521-15	1/4W 1.5k ohm
R230	119-2221-15	1/10W 2.2k ohm
R231	116-2211-15	1/4W 220 ohm
R233	119-1031-15	1/10W 10k ohm
R234	119-1031-15	1/10W 10k ohm
R235	119-2221-15	1/10W 2.2k ohm
R255	116-4701-15	1/4W 47 ohm

REF No.	PART No.	DESCRIPTION
R256	116-4701-15	1/4W 47 ohm
R257	116-1221-15	1/4W 1.2k ohm
R301	119-1041-15	1/10W 100k ohm
R302	119-1041-15	1/10W 100k ohm
R303	119-1041-15	1/10W 100k ohm
R304	119-1041-15	1/10W 100k ohm
R305	119-1021-15	1/10W 1k ohm
R306	119-1021-15	1/10W 1k ohm
R307	032-0140-58	1/10W 51k ohm F
R308	032-0140-58	1/10W 51k ohm F
R309	032-0140-58	1/10W 51k ohm F
R310	032-0140-58	1/10W 51k ohm F
R311	032-0140-58	1/10W 51k ohm F
R312	032-0140-58	1/10W 51k ohm F
R313	032-0140-58	1/10W 51k ohm F
R314	032-0140-58	1/10W 51k ohm F
R315	119-1031-15	1/10W 10k ohm
R316	119-1031-15	1/10W 10k ohm
R317	119-1031-15	1/10W 10k ohm
R318	119-1031-15	1/10W 10k ohm
R319	119-1031-15	1/10W 10k ohm
R320	119-1031-15	1/10W 10k ohm
R321	119-1031-15	1/10W 10k ohm
R322	119-1031-15	1/10W 10k ohm
R323	032-0140-96	1/10W 120k ohm F
R324	032-0140-96	1/10W 120k ohm F
R325	032-0140-96	1/10W 120k ohm F
R326	032-0140-96	1/10W 120k ohm F
R327	119-4721-15	1/10W 4.7k ohm
R328	119-4721-15	1/10W 4.7k ohm
R329	119-1241-15	1/10W 120k ohm
R330	119-1041-15	1/10W 100k ohm
R331	119-1221-15	1/10W 1.2k ohm
R332	119-1021-15	1/10W 1k ohm
R333	119-3311-15	1/10W 330 ohm
R334	119-3311-15	1/10W 330 ohm
R335	119-3311-15	1/10W 330 ohm
R336	119-3311-15	1/10W 330 ohm
R337	032-0140-51	1/10W 15k ohm F
R338	032-0140-51	1/10W 15k ohm F
R339	032-0140-51	1/10W 15k ohm F
R340	032-0140-51	1/10W 15k ohm F
R341	119-1011-15	1/10W 100 ohm
R342	119-1011-15	1/10W 100 ohm
R343	119-1011-15	1/10W 100 ohm
R344	119-1011-15	1/10W 100 ohm
R345	119-4731-15	1/10W 47k ohm
R346	119-2731-15	1/10W 27k ohm
R347	119-2731-15	1/10W 27k ohm
R348	119-1031-15	1/10W 10k ohm
R349	119-1031-15	1/10W 10k ohm
R350	119-1031-15	1/10W 10k ohm
R351	119-1831-15	1/10W 18k ohm
R352	119-1021-15	1/10W 1k ohm
R353	119-1021-15	1/10W 1k ohm
R354	119-8221-15	1/10W 8.2k ohm
R355	119-1021-15	1/10W 1k ohm
R356	119-1021-15	1/10W 1k ohm
R357	119-2231-15	1/10W 22k ohm
R358	119-2731-15	1/10W 27k ohm
R359	119-2731-15	1/10W 27k ohm
R360	119-5631-15	1/10W 56k ohm
R361	119-1031-15	1/10W 10k ohm
R362	119-1031-15	1/10W 10k ohm
R363	119-1031-15	1/10W 10k ohm
R364	119-1031-15	1/10W 10k ohm
R365	119-1031-15	1/10W 10k ohm
R366	119-1041-15	1/10W 100k ohm
R367	119-1041-15	1/10W 100k ohm
R368	119-1041-15	1/10W 100k ohm
R369	119-1041-15	1/10W 100k ohm
R370	119-1041-15	1/10W 100k ohm
R371	119-1041-15	1/10W 100k ohm
R372	119-1041-15	1/10W 100k ohm
R373	119-1041-15	1/10W 100k ohm
R401	032-0165-50	1/4W 750 ohm
R402	032-0165-50	1/4W 750 ohm



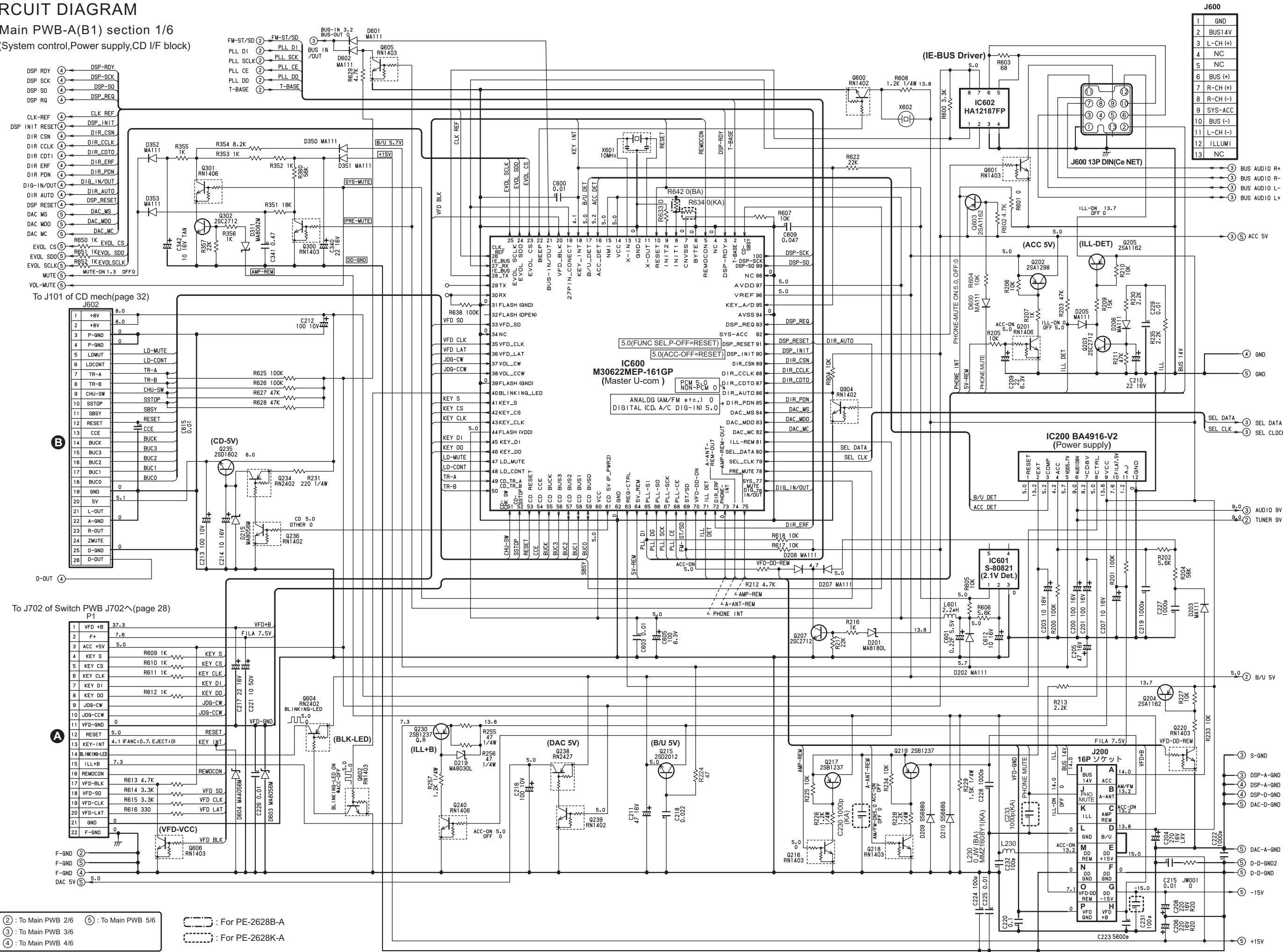
REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
R403	032-0165-50	1/4W 750 ohm	R460	032-0144-67	1/8W 18k ohm J	R634	119-0000-05	1/10W 0 ohm JW (PE2629KA)	R711	119-4711-15	1/10W 470 ohm	R730	119-2201-15	1/10W 22 ohm
R404	032-0165-50	1/4W 750 ohm	R461	119-1021-15	1/10W 1k ohm	R638	119-1041-15	1/10W 100k ohm	R714	119-4721-15	1/10W 4.7k ohm	R760	119-3921-15	1/10W 3.9k ohm
R405	032-0165-50	1/4W 750 ohm	R509	119-1041-15	1/10W 100k ohm	R642	119-0000-05	1/10W 0 ohm JW (PE2629BA)	R715	119-4721-15	1/10W 4.7k ohm	R761	119-1041-15	1/10W 100k ohm
R406	032-0165-50	1/4W 750 ohm	R510	119-1041-15	1/10W 100k ohm	R650	119-1021-15	1/10W 1k ohm	R716	119-1031-15	1/10W 10k ohm	R762	119-1011-15	1/10W 100 ohm
R407	032-0165-50	1/4W 750 ohm	R511	119-1041-15	1/10W 100k ohm	R651	119-1021-15	1/10W 1k ohm	R717	119-4711-15	1/10W 470 ohm	R771	119-1031-15	1/10W 10k ohm
R408	032-0165-50	1/4W 750 ohm	R513	032-0144-64	1/8W 330 ohm J	R652	119-1021-15	1/10W 1k ohm	R718	119-4711-15	1/10W 470 ohm	R772	119-1031-15	1/10W 10k ohm
R409	032-0165-50	1/4W 750 ohm	R514	032-0144-68	1/8W 22k ohm J	R901	119-8211-15	1/10W 820 ohm	R719	119-4711-15	1/10W 470 ohm	R773	119-1031-15	1/10W 10k ohm
R410	032-0165-50	1/4W 750 ohm	R515	119-1021-15	1/10W 1k ohm	R902	119-8211-15	1/10W 820 ohm	R720	119-5611-15	1/10W 560 ohm	R774	119-1031-15	1/10W 10k ohm
R411	032-0165-50	1/4W 750 ohm	R516	032-0144-68	1/8W 22k ohm J	R903	119-8211-15	1/10W 820 ohm	R721	119-4711-15	1/10W 470 ohm	R776	119-1041-15	1/10W 100k ohm
R412	032-0165-50	1/4W 750 ohm	R517	119-1021-15	1/10W 1k ohm	R904	119-1031-15	1/10W 10k ohm	R722	119-4711-15	1/10W 470 ohm	R777	119-1041-15	1/10W 100k ohm
R413	032-0144-51	1/8W 4.7k ohm J	R518	032-0144-64	1/8W 330 ohm J	R905	119-3321-15	1/10W 3.3k ohm	R723	119-4711-15	1/10W 470 ohm	R778	119-1041-15	1/10W 100k ohm
R414	032-0144-51	1/8W 4.7k ohm J	R519	032-0144-64	1/8W 330 ohm J	R906	032-0140-80	1/10W 18k ohm F	R724	119-4711-15	1/10W 470 ohm	R779	119-1041-15	1/10W 100k ohm
R415	032-0144-51	1/8W 4.7k ohm J	R520	032-0144-68	1/8W 22k ohm J	R907	119-4711-15	1/10W 470 ohm	R725	119-4711-15	1/10W 470 ohm	S701	013-6312-50	SKRP-ABE-010
R416	032-0144-51	1/8W 4.7k ohm J	R521	119-1021-15	1/10W 1k ohm	R908	119-4711-15	1/10W 470 ohm	R726	119-4711-15	1/10W 470 ohm	S702	013-6312-50	SKRP-ABE-010
R417	032-0144-51	1/8W 4.7k ohm J	R522	032-0144-68	1/8W 22k ohm J	R909	119-1011-15	1/10W 100 ohm	R727	119-4711-15	1/10W 470 ohm	S703	013-6312-50	SKRP-ABE-010
R418	032-0144-51	1/8W 4.7k ohm J	R523	119-1021-15	1/10W 1k ohm	R910	119-2221-15	1/10W 2.2k ohm	R728	119-4711-15	1/10W 470 ohm	S704	013-6312-50	SKRP-ABE-010
R419	032-0144-51	1/8W 4.7k ohm J	R524	032-0144-64	1/8W 330 ohm J	R911	119-3311-15	1/10W 330 ohm						
R420	032-0144-51	1/8W 4.7k ohm J	R525	032-0144-64	1/8W 330 ohm J	R912	119-1001-15	1/10W 10 ohm						
R421	032-0144-51	1/8W 4.7k ohm J	R526	032-0144-68	1/8W 22k ohm J	R913	119-3311-15	1/10W 330 ohm						
R422	032-0144-51	1/8W 4.7k ohm J	R527	119-1021-15	1/10W 1k ohm	R914	119-1521-15	1/10W 1.5k ohm						
R423	032-0144-51	1/8W 4.7k ohm J	R528	032-0144-68	1/8W 22k ohm J	R915	119-4711-15	1/10W 470 ohm						
R424	032-0144-51	1/8W 4.7k ohm J	R529	119-1021-15	1/10W 1k ohm	R916	119-1011-15	1/10W 100 ohm						
R425	117-5621-15	1/8W 5.6k ohm	R530	032-0144-64	1/8W 330 ohm J	R917	119-1021-15	1/10W 1k ohm						
R426	117-5621-15	1/8W 5.6k ohm	R531	032-0144-64	1/8W 330 ohm J	R918	119-1031-15	1/10W 10k ohm						
R427	117-5621-15	1/8W 5.6k ohm	R532	032-0144-68	1/8W 22k ohm J	R919	119-1031-15	1/10W 10k ohm						
R428	117-5621-15	1/8W 5.6k ohm	R533	119-1021-15	1/10W 1k ohm	R920	119-1021-15	1/10W 1k ohm						
R429	032-0154-52	1/4W 4.7k ohm	R534	032-0144-68	1/8W 22k ohm J	R921	119-1021-15	1/10W 1k ohm						
R430	032-0144-51	1/8W 4.7k ohm J	R535	119-1021-15	1/10W 1k ohm	R922	119-1021-15	1/10W 1M ohm						
R431	032-0144-51	1/8W 4.7k ohm J	R536	032-0144-64	1/8W 330 ohm J	R923	119-5611-15	1/10W 560 ohm						
R432	032-0154-52	1/4W 4.7k ohm	R538	119-1051-15	1/10W 1M ohm	R924	119-1031-15	1/10W 10k ohm						
R433	032-0154-52	1/4W 4.7k ohm	R539	119-1051-15	1/10W 1M ohm	R925	119-2711-15	1/10W 270 ohm						
R434	032-0144-51	1/8W 4.7k ohm J	R600	119-3321-15	1/10W 3.3k ohm	R926	119-3311-15	1/10W 330 ohm						
R435	032-0144-51	1/8W 4.7k ohm J	R601	119-4731-15	1/10W 47k ohm	R927	119-3311-15	1/10W 330 ohm						
R436	032-0154-52	1/4W 4.7k ohm	R602	119-4721-15	1/10W 4.7k ohm	R928	119-3311-15	1/10W 330 ohm						
R437	032-0154-52	1/4W 4.7k ohm	R603	119-6801-15	1/10W 68 ohm	R929	119-3311-15	1/10W 330 ohm						
R438	032-0144-51	1/8W 4.7k ohm J	R604	119-1031-15	1/10W 10k ohm	R930	119-5621-15	1/10W 5.6k ohm						
R439	032-0144-51	1/8W 4.7k ohm J	R605	119-1031-15	1/10W 10k ohm	R931	119-3311-15	1/10W 330 ohm						
R440	032-0154-52	1/4W 4.7k ohm	R606	119-5621-15	1/10W 5.6k ohm	R932	119-1041-15	1/10W 100k ohm						
R441	032-0154-52	1/4W 4.7k ohm	R607	119-1031-15	1/10W 10k ohm	R934	119-1041-15	1/10W 100k ohm						
R442	032-0144-51	1/8W 4.7k ohm J	R608	116-1221-15	1/4W 1.2k ohm	R935	119-1221-15	1/10W 1.2k ohm						
R443	032-0144-51	1/8W 4.7k ohm J	R609	119-1021-15	1/10W 1k ohm	R936	119-1521-15	1/10W 1.5k ohm						
R444	032-0154-52	1/4W 4.7k ohm	R610	119-1021-15	1/10W 1k ohm	R937	119-1041-15	1/10W 100k ohm						
R445	032-0154-52	1/4W 4.7k ohm	R611	119-1021-15	1/10W 1k ohm	R938	119-1041-15	1/10W 100k ohm						
R446	032-0144-51	1/8W 4.7k ohm J	R612	119-1021-15	1/10W 1k ohm	R945	119-1031-15	1/10W 10k ohm						
R447	032-0144-51	1/8W 4.7k ohm J	R613	119-4721-15	1/10W 4.7k ohm	R946	119-1031-15	1/10W 10k ohm						
R448	032-0154-52	1/4W 4.7k ohm	R614	119-3321-15	1/10W 3.3k ohm	R947	119-1031-15	1/10W 10k ohm						
R449	032-0154-52	1/4W 4.7k ohm	R615	119-3321-15	1/10W 3.3k ohm	SUP51	060-0122-20	DSP-141N-S00B						
R450	032-0144-51	1/8W 4.7k ohm J	R616	119-3311-15	1/10W 330 ohm	X1	061-1066-00	7.2MHz						
R451	032-0144-51	1/8W 4.7k ohm J	R617	119-1031-15	1/10W 10k ohm	X601	060-1505-50	10MHz						
R452	032-0154-52	1/4W 4.7k ohm	R618	119-1031-15	1/10W 10k ohm	X602	060-0100-51	BUZZER						
R453	032-0144-67	1/8W 18k ohm J	R622	119-2231-15	1/10W 22k ohm	X901	061-3542-90	18.432MHz						
R454	117-5621-15	1/8W 5.6k ohm	R625	119-1041-15	1/10W 100k ohm	PWB	039-2566-00	PWB(WITHOUT COMPONENT)						
R455	117-5621-15	1/8W 5.6k ohm	R626	119-1041-15	1/10W 100k ohm									
R456	032-0144-67	1/8W 18k ohm J	R627	119-4731-15	1/10W 47k ohm									
R457	032-0144-67	1/8W 18k ohm J	R628	119-4731-15	1/10W 47k ohm									
R458	117-5621-15	1/8W 5.6k ohm	R629	119-4721-15	1/10W 4.7k ohm									
R459	117-5621-15	1/8W 5.6k ohm	R633	119-0000-05	1/10W 0 ohm JW									

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
C202	042-1393-00	35V100uF	C265	042-1676-00	16V470uF	L253	010-8028-00	520uH	S705	013-6312-50	SKRP-ABE-010
C205	042-9134-00	63V47uF	D250	001-0188-01	1S1885A	L254	010-8028-00	520uH	S706	013-6305-50	SKQMAH
C206	042-9134-00	63V47uF	D251	001-4003-00	ZSA5A27	Q205	191-1243-00	ZSB1243	S707	013-6305-50	SKQMAH
C216	172-1031-15	0.01uF	D252	001-0466-91	S5688G	Q206	192-2458-00	2SC2458	S708	013-6312-50	SKRP-ABE-010
C250	042-1676-00	16V470uF	F201	060-8049-01	FUSE 0.5A	Q251	192-2458-00	2SC2458	S709	013-6305-50	SKQMAH
C252	043-0251-10	0.1uF	FR251	060-0057-54	FUSE 5A	R213	111-2221-94	1/4W 2.2k ohm	S710	013-6305-50	SKQMAH
C254	042-1677-00	35V1000uF	IC202	060-6026-00	DC-DC CONV	R214	111-1031-94	1/4W 10k ohm	S711	013-6312-50	SKRP-ABE-010
C256	043-0251-10	0.1uF	IC250	060-6008-00	HMA-1570-2492	R215	111-1521-94	1/4W 1.5k ohm	S712	013-6312-50	SKRP-ABE-010
C258	187-1063-37	16V10uF	J250	073-0722-01	10P	R216	111-8221-94	1/4W 8.2k ohm	S713	013-6305-50	SKQMAH
C259	042-9129-00	16V270uF	J251	074-0884-02	OUTLET SOCKET	R217	114-3311-11	1W 330 ohm	S714	013-6305-50	SKQMAH
C260	042-1548-03	16V100uF	L201	010-6009-88	220uH	R222	111-1031-94	1/4W 10k ohm	S715	013-6312-50	SKRP-ABE-010
C261	042-1548-03	16V100uF	L202	010-2165-05	150uH	R253	111-1031-94	1/4W 10k ohm	S716	013-6312-50	SKRP-ABE-010
C262	042-1504-05	16V22uF	L250	010-2303-00	20uH	R254	111-4721-94	1/4W 4.7k ohm	S717	013-6312-50	SKRP-ABE-010
C263	042-1504-05	16V22uF	L251	010-2303-00	20uH	PWB	039-2568-00	PWB(WITHOUT COMPONENT)	S718	016-0025-00	VR W/SHAFT
C264	042-1676-00	16V470uF	L252	010-2326-00	BL02RN2-R62				PWB	039-2567-00	PWB(WITHOUT COMPONENT)

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
C1	168-1042-78	16V 0.1uF	C35	046-6812-58	680pF	R2	117-1001-15	1/8W 10 ohm
C3	163-2273-05	4V220uF	C36	168-1042-78	16V 0.1uF	R9	033-2211-15	1/10W 220 ohm
C4	168-1042-78	16V 0.1uF	C37	168-1042-78	16V 0.1uF	R11	033-1051-15	1/10W 1M ohm
C5	163-1073-35	16V100uF	C38	046-1522-58	1500pF	R12	119-2221-15	1/10W 2.2k ohm
C6	163-1073-35	16V100uF	C39	046-4722-58	4700pF	R13	033-2211-15	1/10W 220 ohm
C7	168-1042-78	16V 0.1uF	C40	046-1032-78	0.01uF	R14	033-2211-15	1/10W 220 ohm
C9	178-1052-78	1uF	C41	046-1532-78	0.			

CIRCUIT DIAGRAM

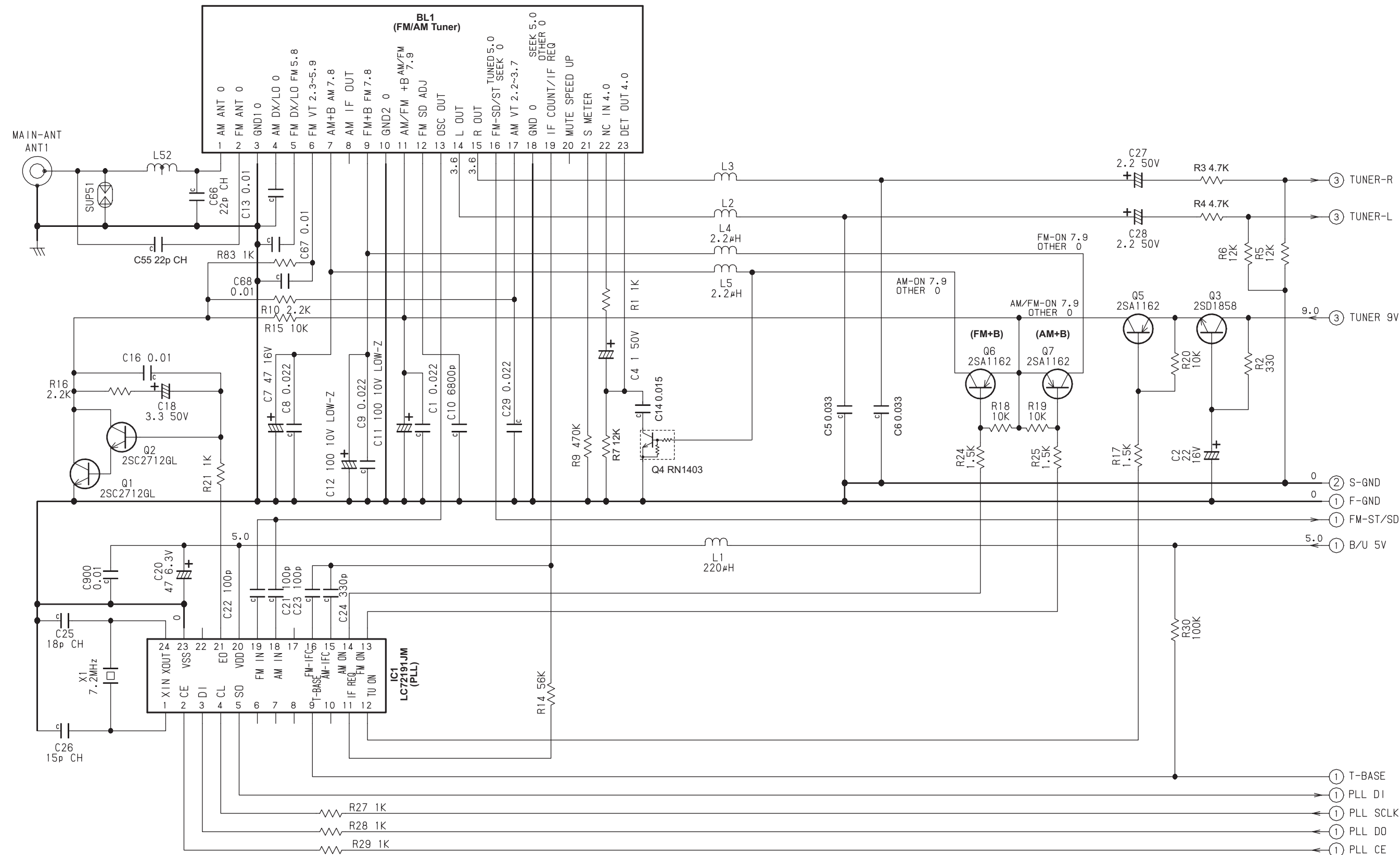
Main PWB-A(B1) section 1/6  
(System control,Power supply,CD I/F block)





Main PWB-A(B1) section 2/6

(Tuner block)



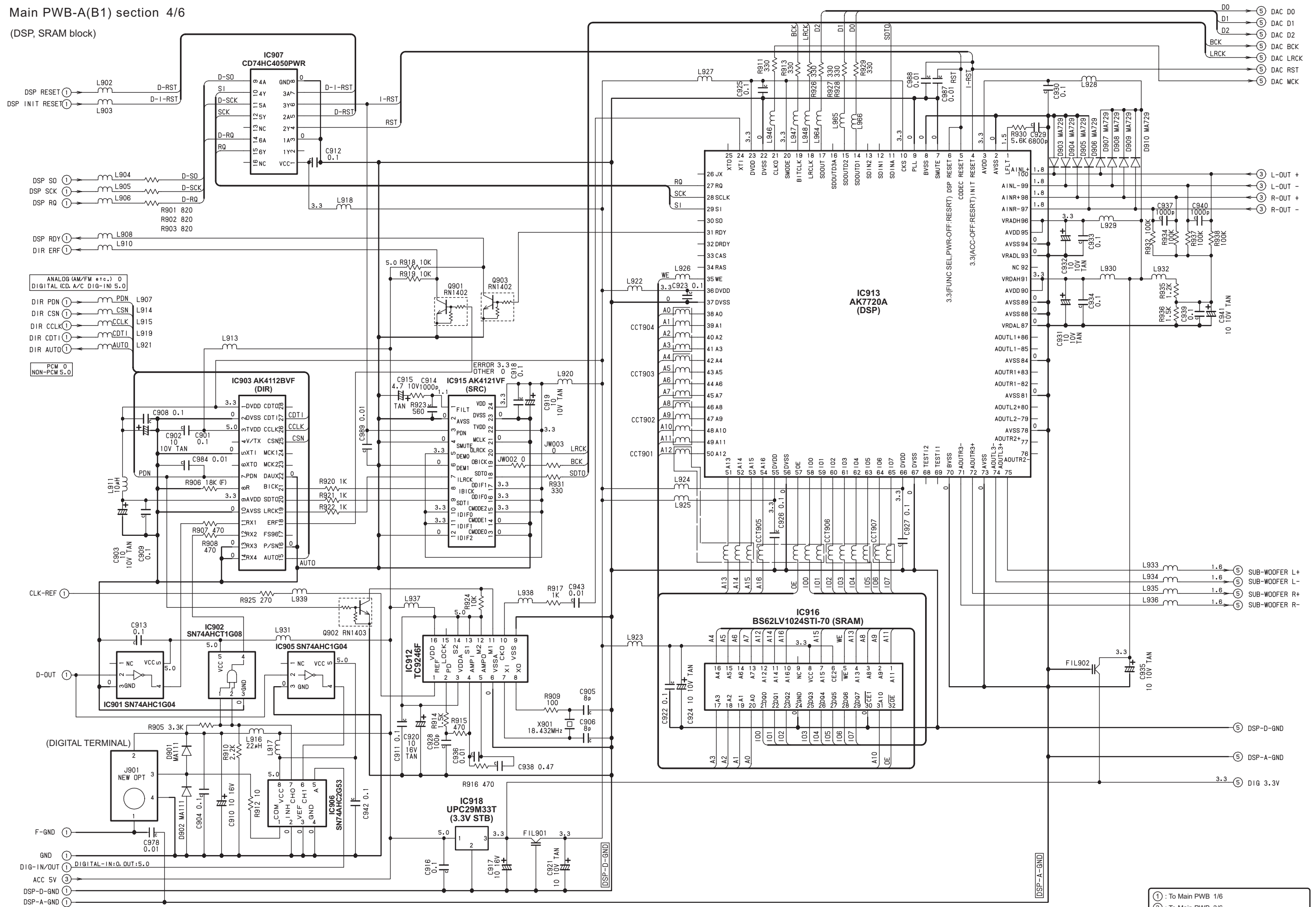
- ① : To Main PWB 1/6
- ② : To Main PWB 2/6
- ③ : To Main PWB 3/6

(AUX IN, Selector block)



## Main PWB-A(B1) section 4/6

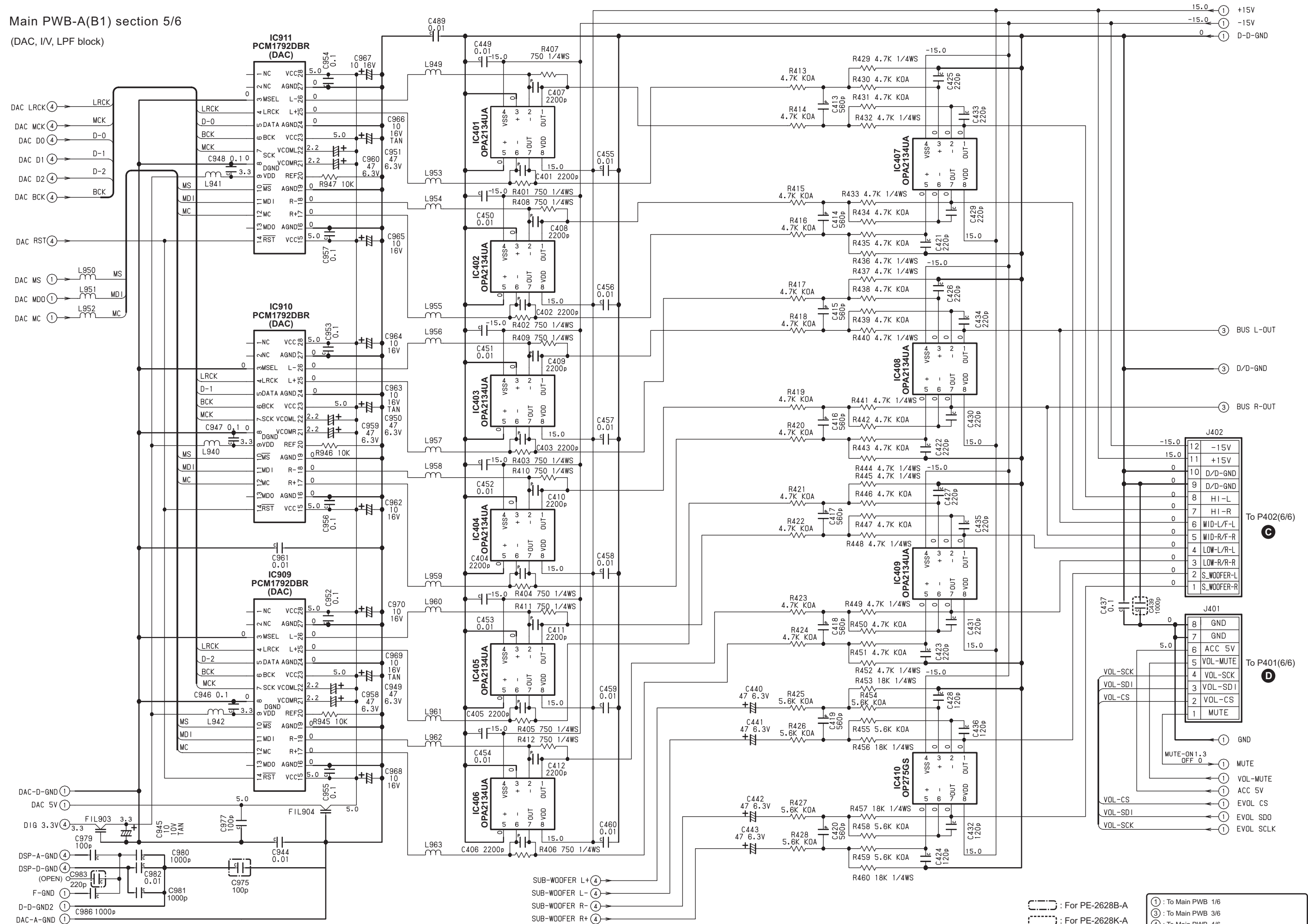
(DSP, SRAM block)



- ① : To Main PWB 1/6  
 ③ : To Main PWB 3/6  
 ⑤ : To Main PWB 5/6

# Main PWB-A(B1) section 5/6

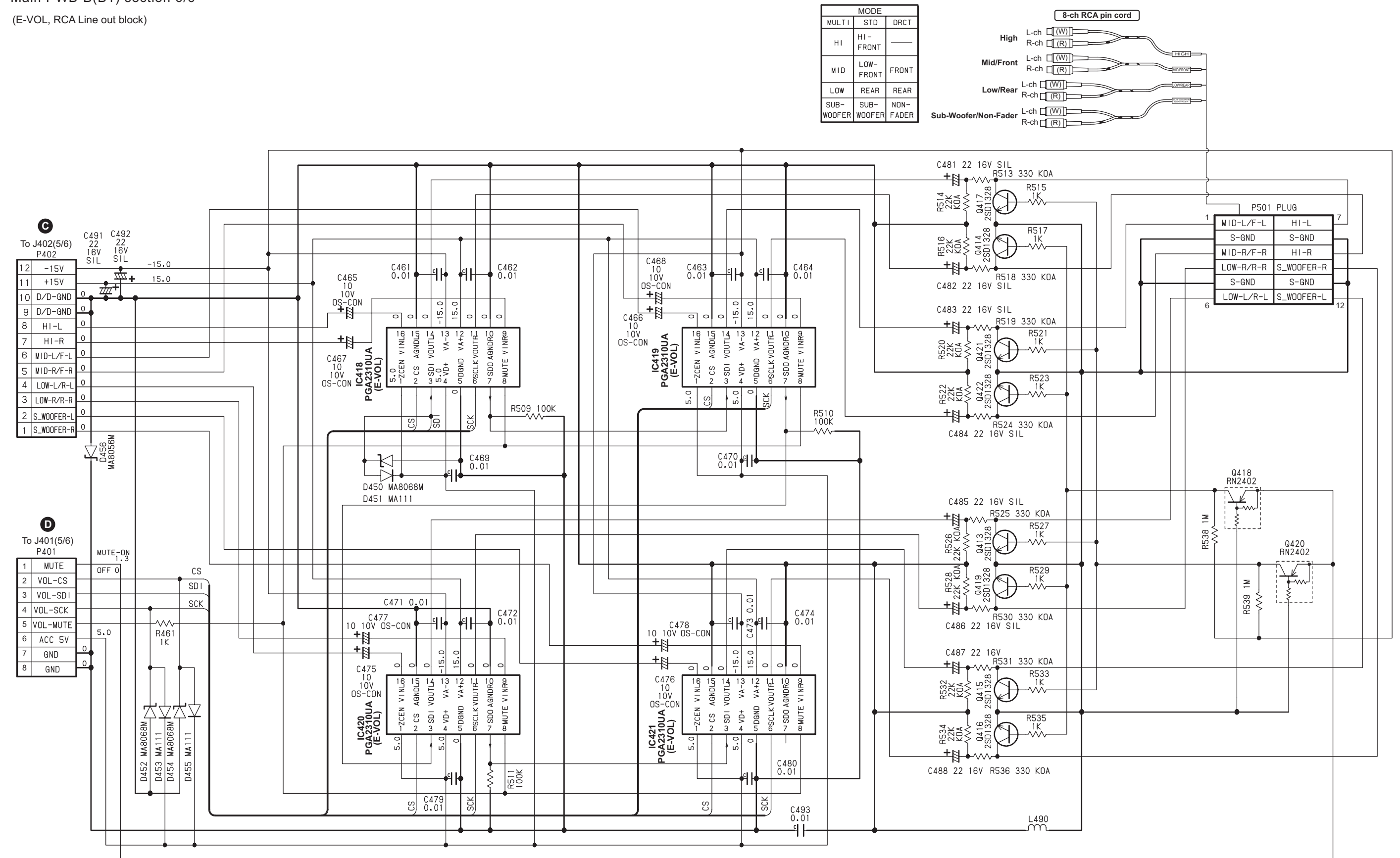
(DAC, I/V, LPF block)



DRZ9255  
HX-D2

# Main PWB-B(B1) section 6/6

(E-VOL, RCA Line out block)

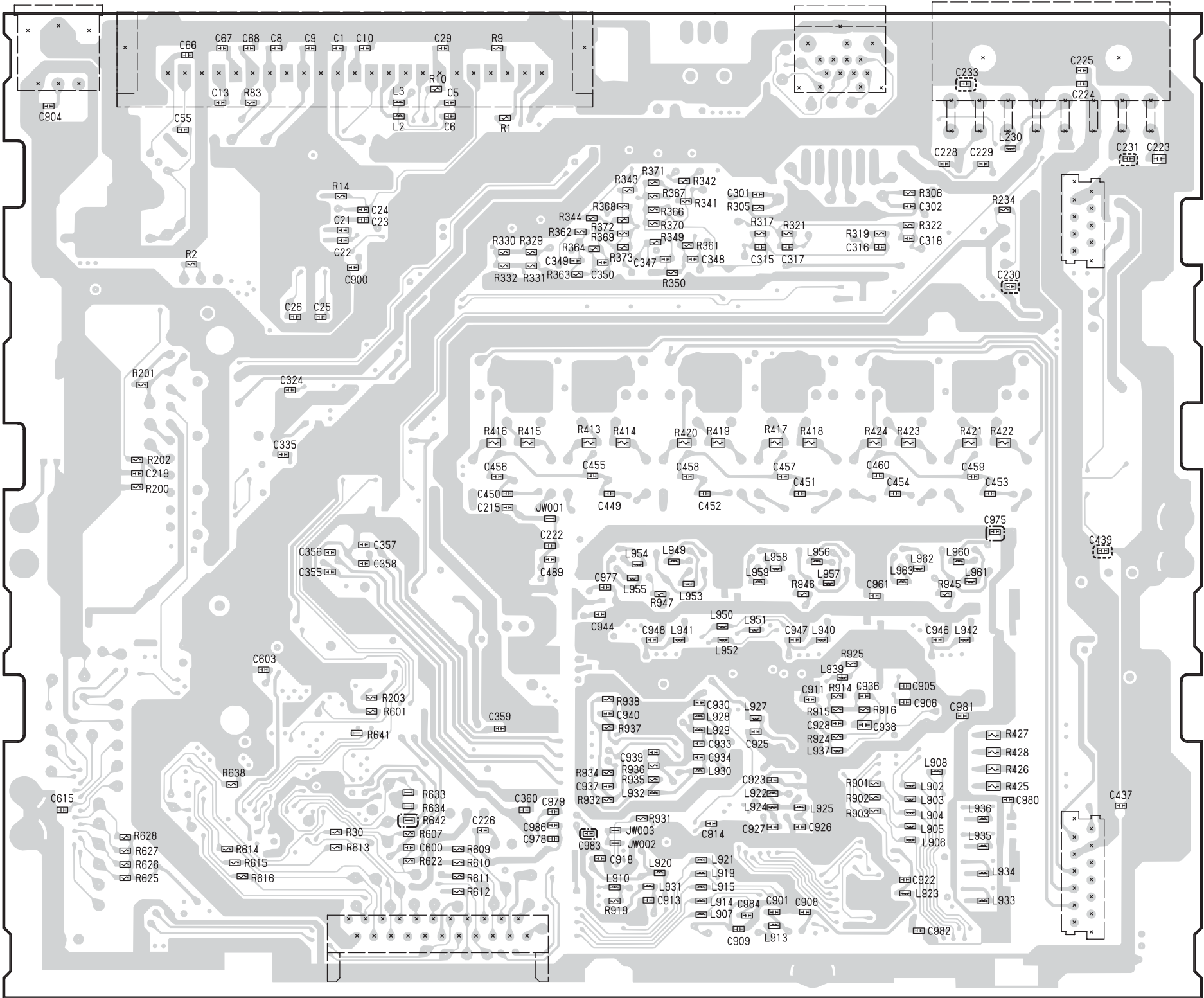




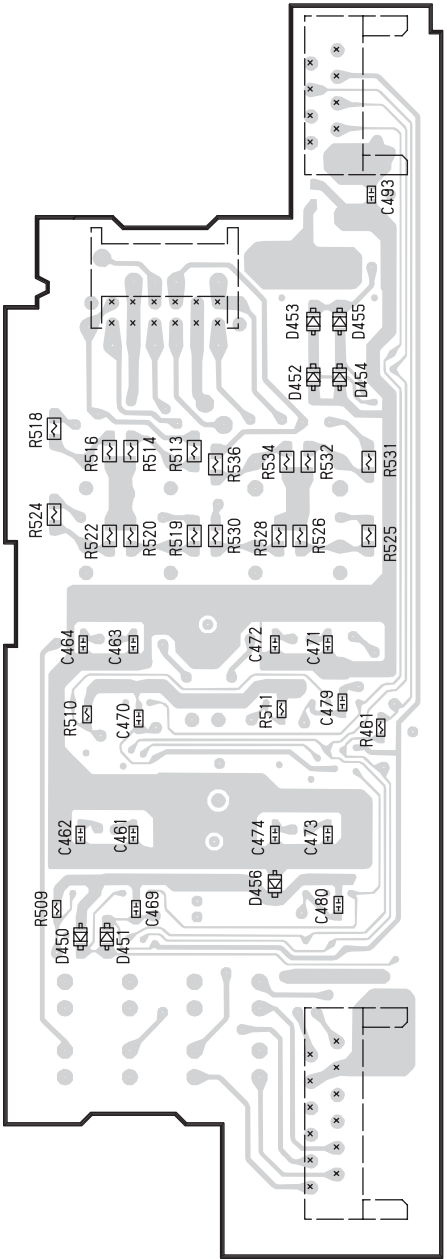
PRINTED WIRING BOARD

Main PWB(B1) section 1/2

Caution:  
COMPONENT SIDE: Parts on the component side seen from the component side are indicated.  
SOLDER SIDE: Parts on the solder side seen from the solder side are indicated.



Main PWB-A (B1)  
SOLDER SIDE

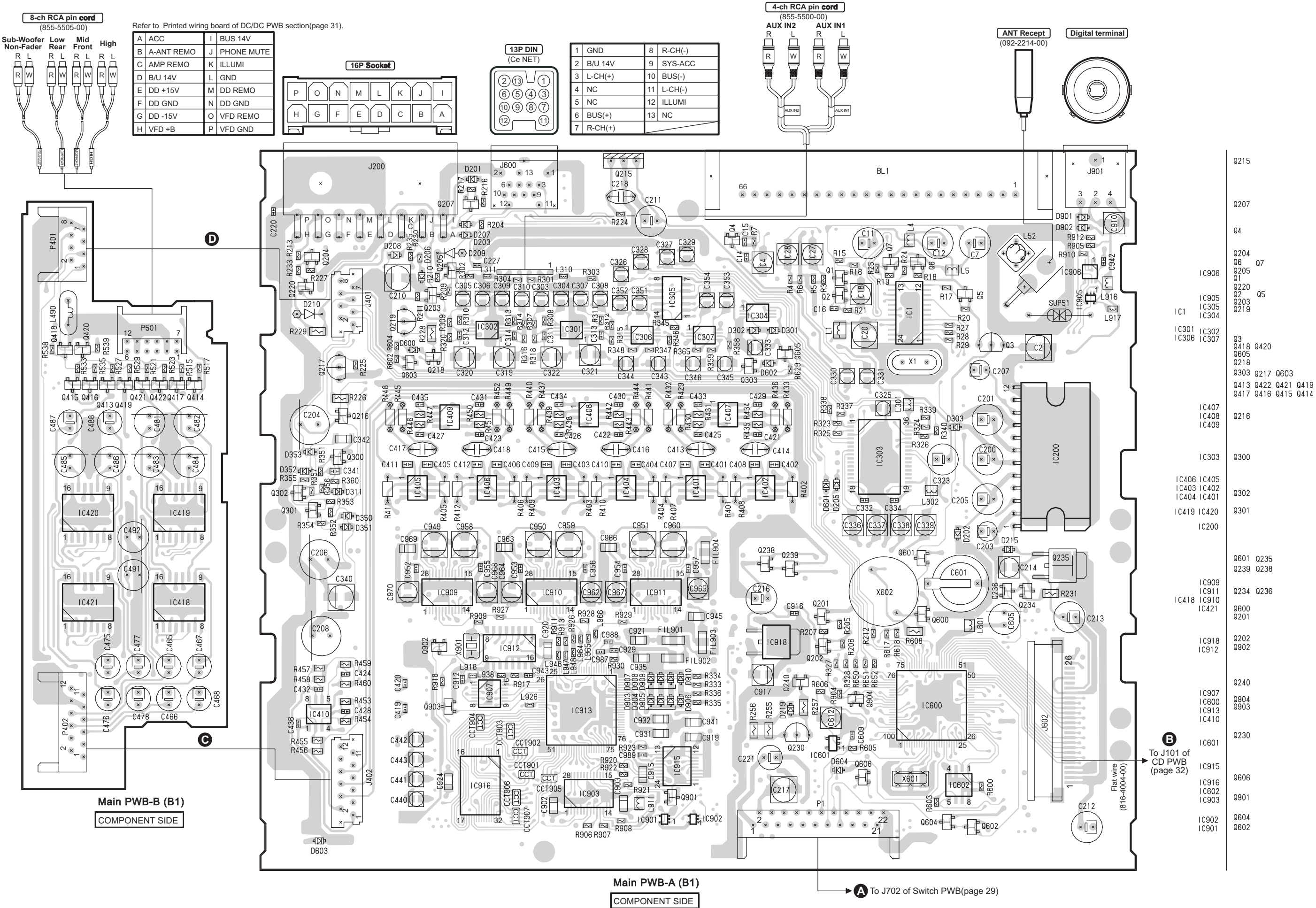


Main PWB-B (B1)  
SOLDER SIDE

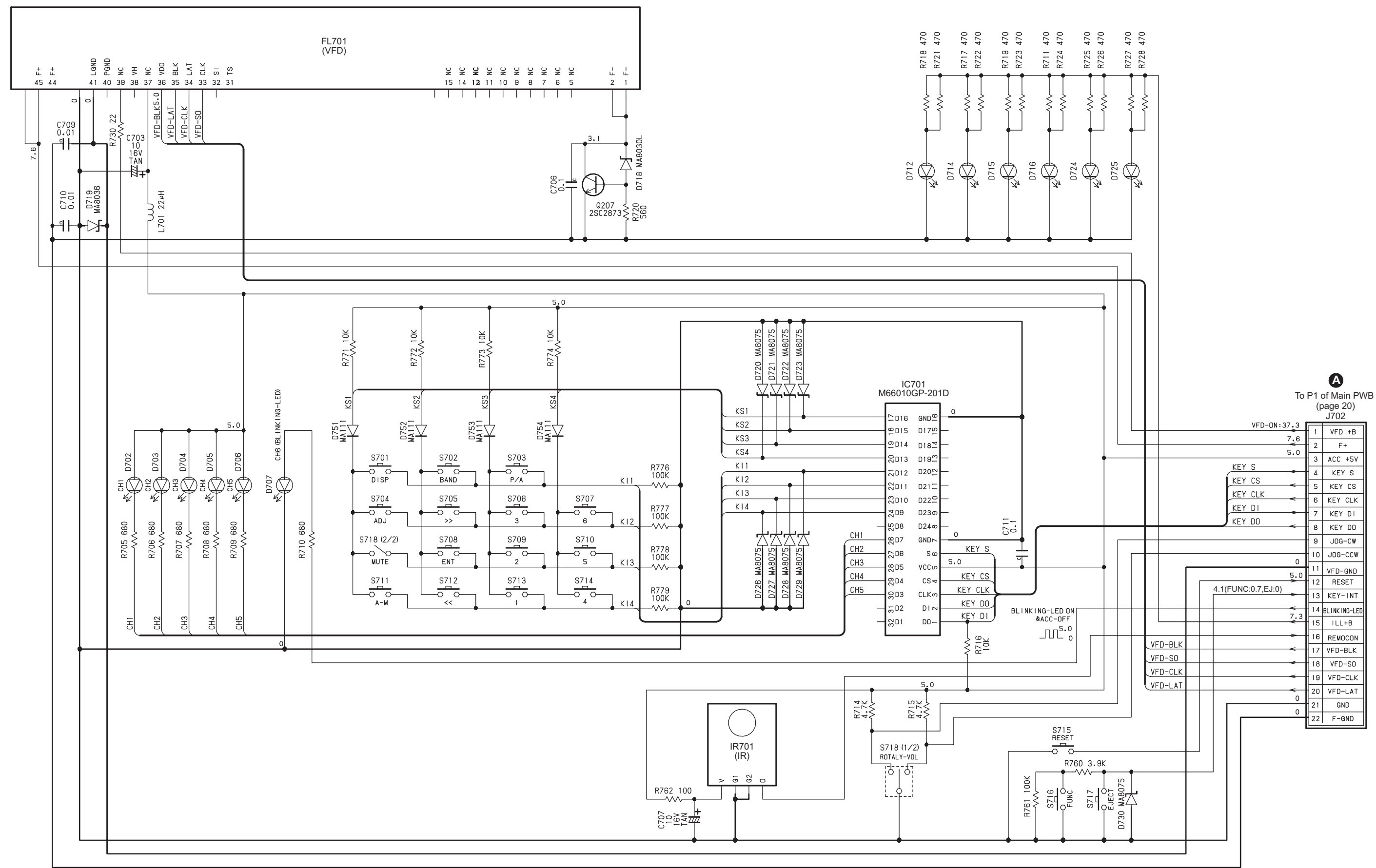
⬡ : For PE-2628B-A  
⬡ : For PE-2628K-A



Main PWB(B1) section 2/2

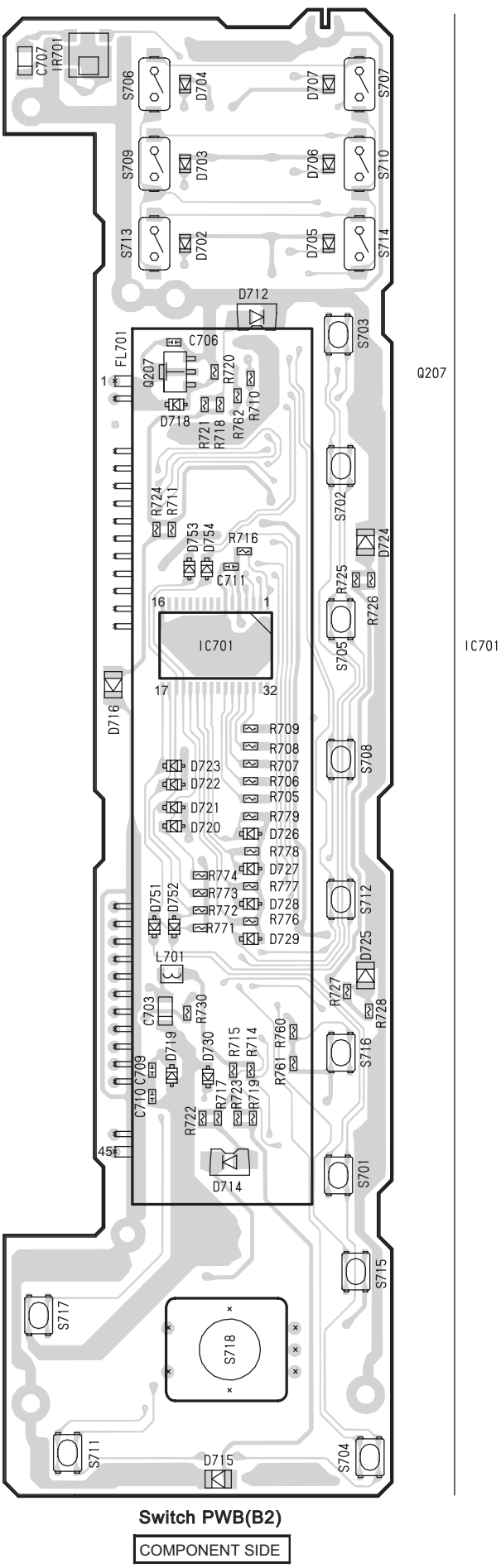
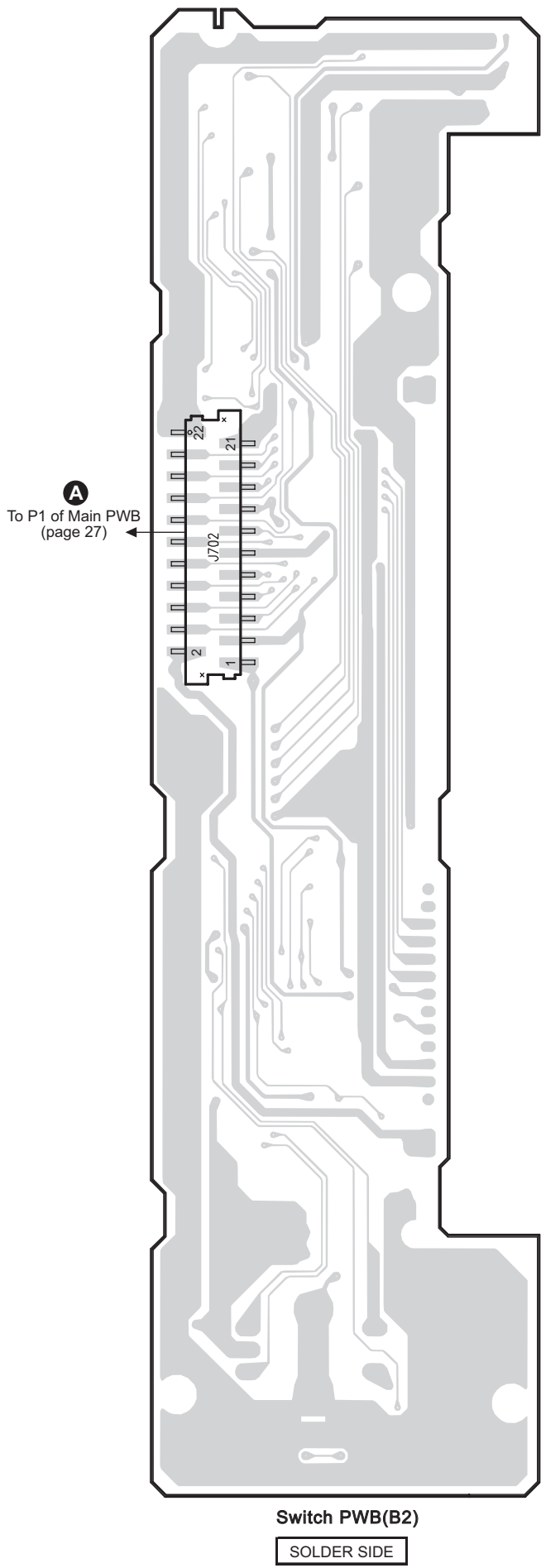


CIRCUIT DIAGRAM  
Switch PWB(B2) section



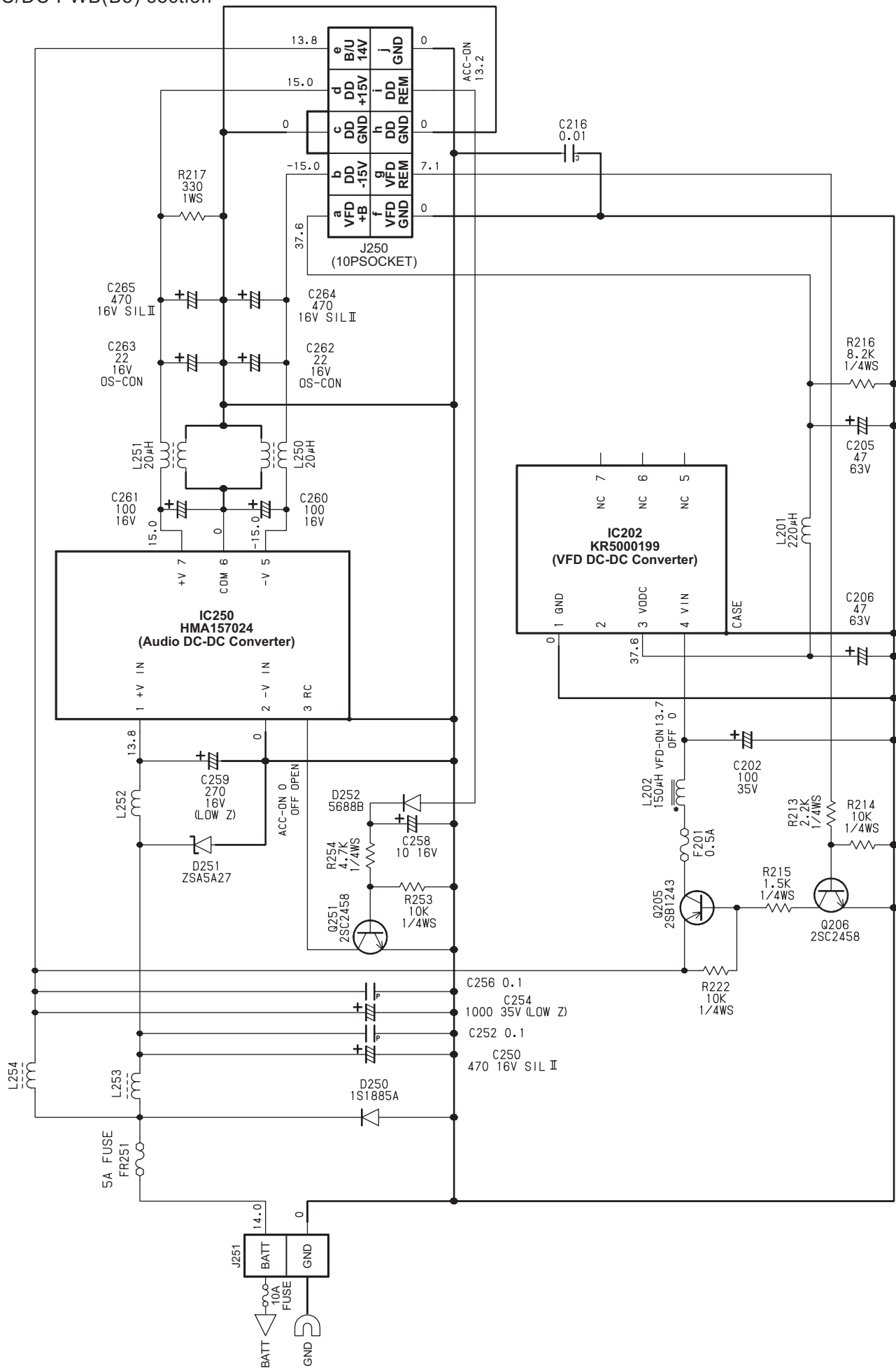
PRINTED WIRING BOARD

Switch PWB(B2) section

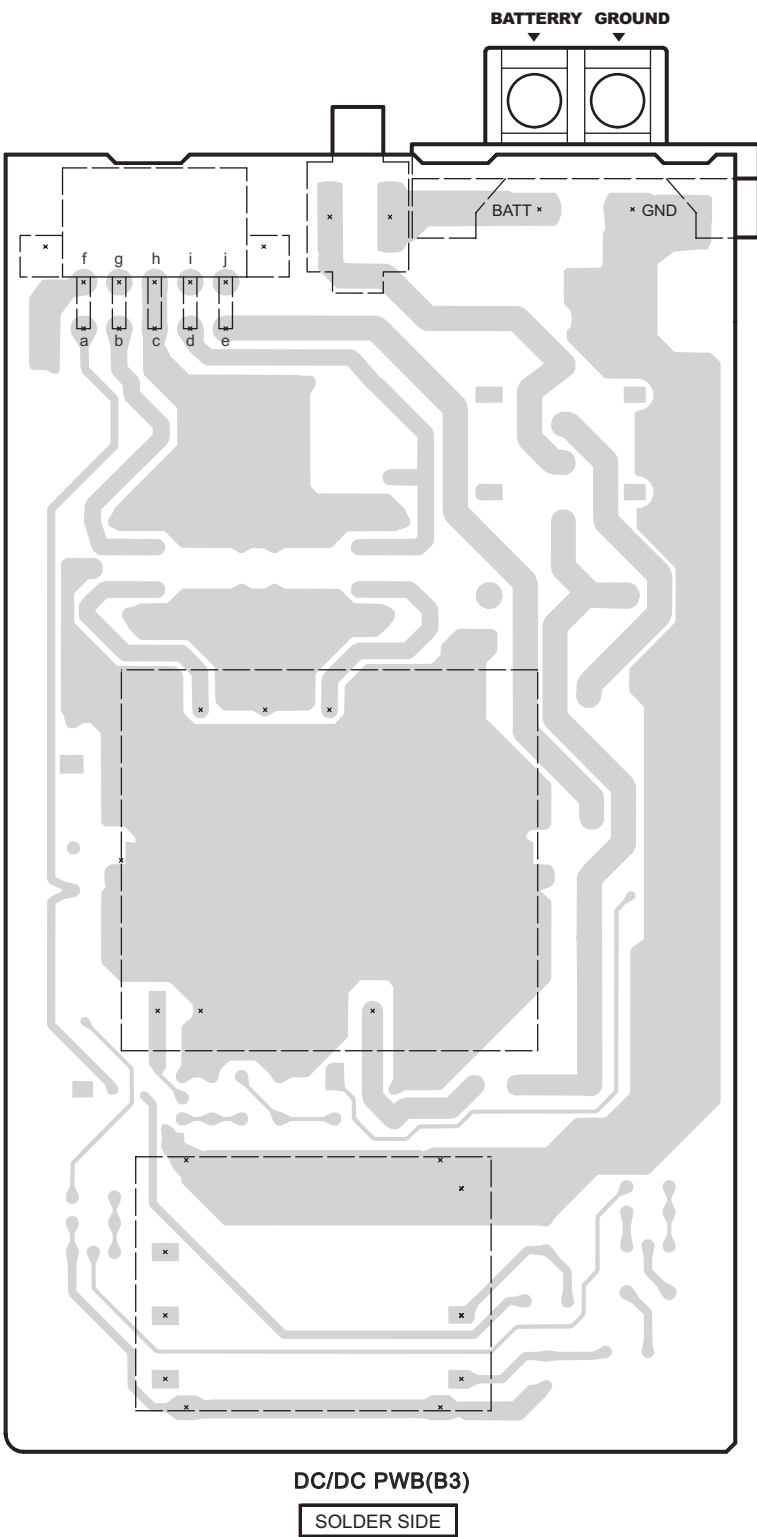
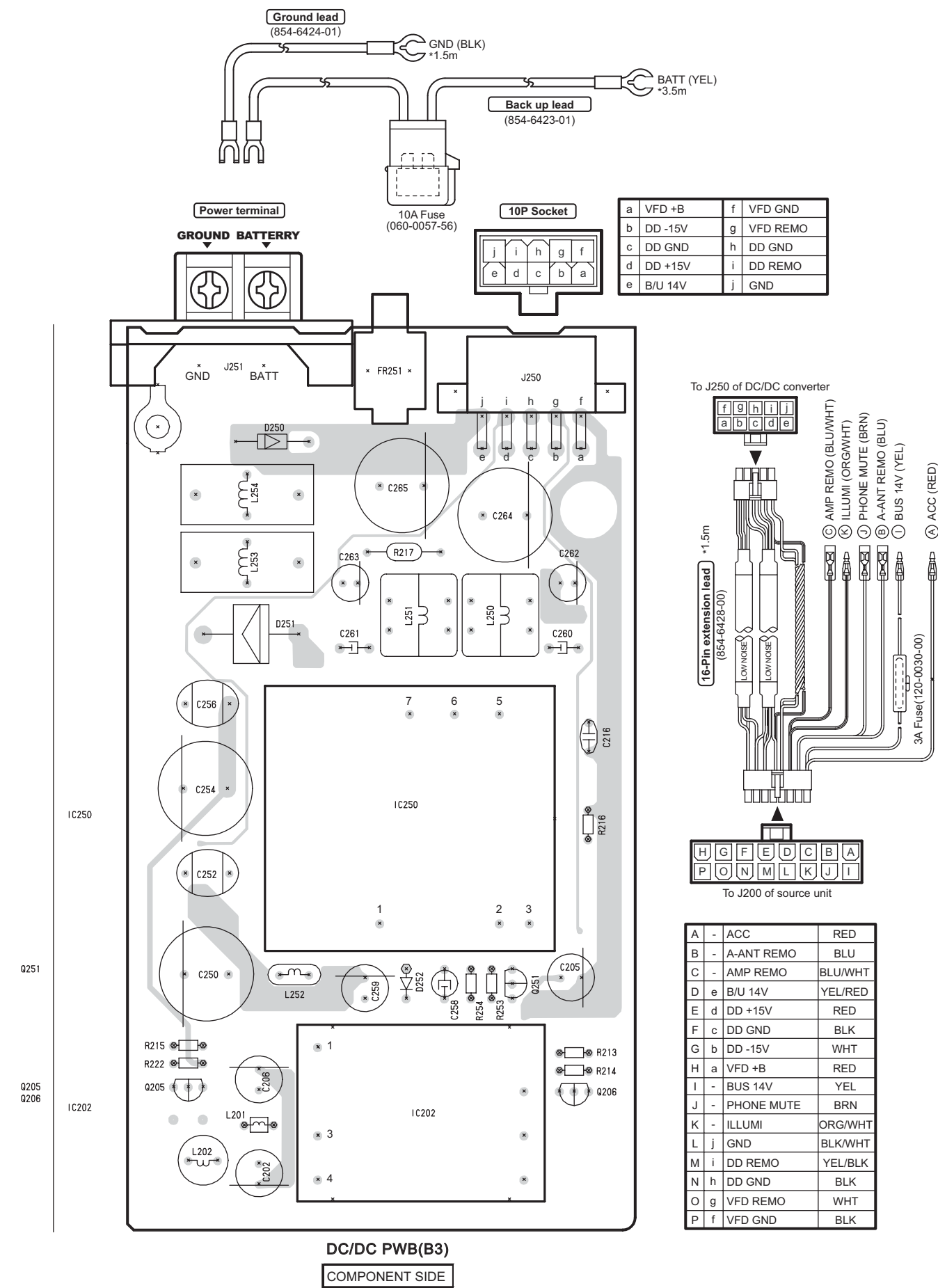


CIRCUIT DIAGRAM

DC/DC PWB(B3) section



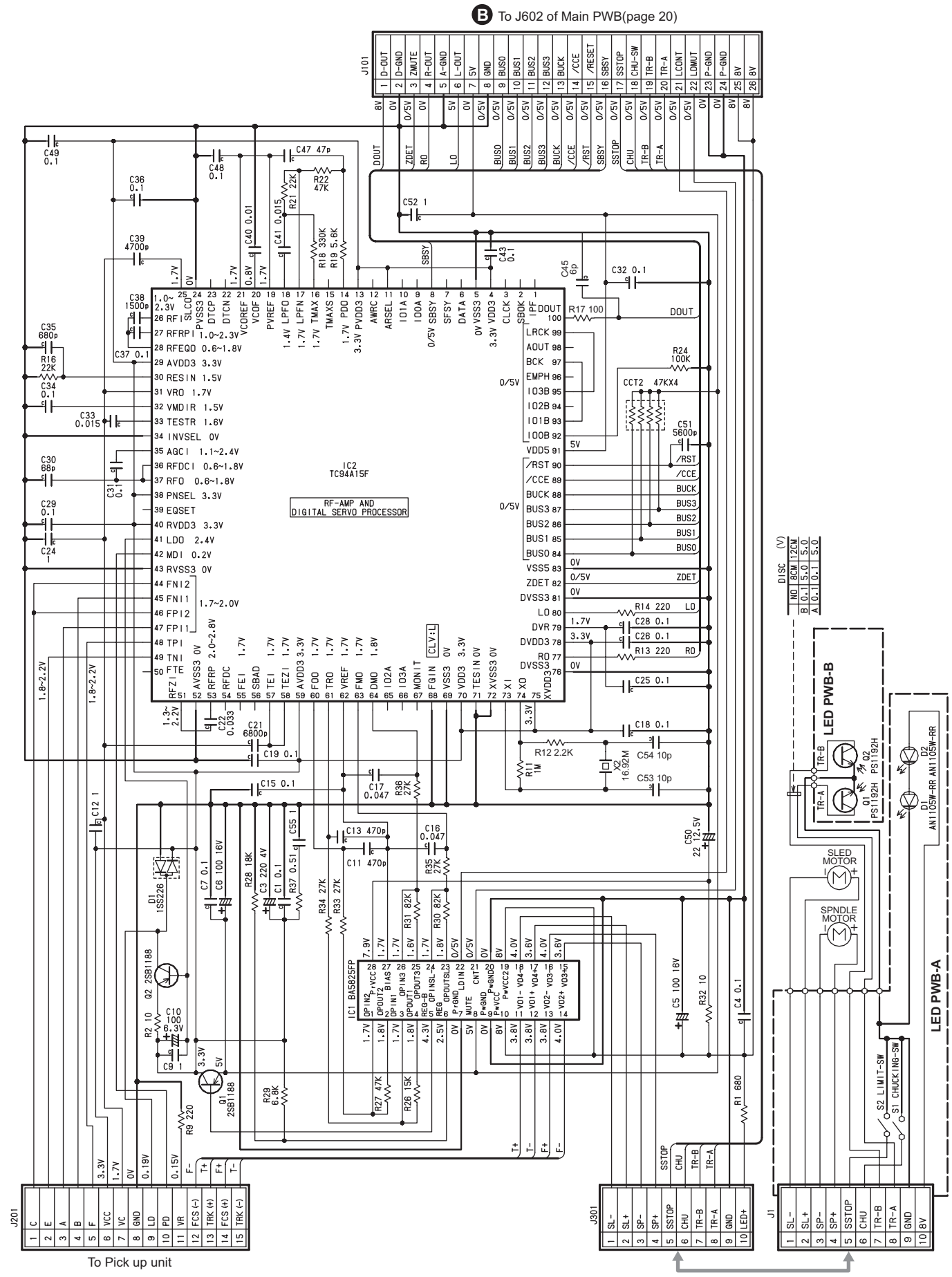
PRINTED WIRING BOARD  
DC/DC PWB(B3) section





CIRCUIT DIAGRAM

CD PWB(B4), LED PWB(B5) section



PRINTED WIRING BOARD

CD PWB(B4), LED PWB(B5) section

